

Task: 4323

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
1594 West North Temple Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801
Telephone: (801) 538-5291 Fax: (801) 359-3940

NOTICE OF INTENTION TO COMMENCE SMALL MINING OPERATIONS

The information requirements of this form are based on provisions of the Mined Land Reclamation Act, Title 40-8, Utah Code Annotated 1987, and the General Rules as promulgated under the Utah Minerals Regulatory Program (R647). The rules and Act are available online at <http://www.rules.utah.gov/publicat/code/r647/r647.htm> and http://le.utah.gov/~code/TITLE40/40_08.htm.

Cultural Resources Survey: To fulfill its obligations under Utah Code Annotated 9-8-404, the Division needs cultural resource (archaeology) information. The amount and type of information required will depend on the mine location, the history of previous disturbance, and other factors. Please contact the Division for further information.

A permit fee of \$150 or \$500 must accompany this application (Utah Code Ann. §40-8-7(1)(i)) and is due annually. The fee is \$150 for a mine with a disturbed area of five acres or less, and the fee is \$500 if the disturbed area is between five and ten acres.

"Small Mining Operations" are operations which have a disturbed area of ten or fewer surface acres at any time in unincorporated areas, or five acres or fewer in incorporated areas.

I. GENERAL INFORMATION (Rule R647-3-104)

1. Name of Mine: Whirlwind Mine
2. Operator Name (Legal Name): Energy Fuels Resources Corporation

Mailing Address: 44 Union Boulevard, Suite 600
City, State, Zip: Lakewood, CO 80228
Phone: (303) 974-2140 Fax: (303) 974-2141
E-mail Address: f.filas@energyfuels.com

Type of Business: Corporation (☒) , LLC (☐) , Sole Proprietorship (dba) (☐)
General Partnership (☐) , Limited Partnership (☐) , Individual (☐) .

Business Entity (not individuals) must be registered (and maintain registration) with the State of Utah, Division of Corporations (DOC) If not currently registered, contact www.commerce.utah.gov to renew or apply. Business Entity #: 6853864-0143

Local Business License #: _____ (if required)
Issued by: County: _____ or City: _____

3. Contact Person(s):

Registered Utah Agent (as identified with the Utah DOC) (if individual leave blank):

Name: Donn Pillmore Title: VP Arizona Strip Operations
Address: DMP Consulting, LLC, 460 E 300 South
City, State, Zip: Kanab, UT 84741
Phone: (435) 644-3125 Fax: (435) 644-3125
E-mail Address: dpillmore@energyfuels.com

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I.3. Contact Person(s) (continued):

This person to be notified for: permitting (☒) surety (☒) (check all that apply)

Name: Zach Rogers Title: Environmental Engineer

Address: 44 Union Boulevard, Suite 600

City, State, Zip: Lakewood, CO 80228

Phone: (303) 974-2151 Fax: (303) 974-2141

Emergency, Weekend, or Holiday Phone: (303) 916-8541

E-mail Address: zrogers@energyfuels.com

This person to be notified for: permitting (☐) surety (☐) (check all that apply)

Name: _____ Title: _____

Address: _____

City, State, Zip: _____

Phone: _____ Fax: _____

Emergency, Weekend, or Holiday Phone: _____

E-mail Address: zrogers@energyfuels.com

4. If Business is a Sole Proprietor (dba) or Individual:

Name of Owner: _____ Title: _____

Business Address: _____

City, State, Zip: _____

Phone: _____ Fax: _____

E-mail Address: _____

If Business is a Corporation:

Name of Officers: Stephen Antony Title: CEO/President

Name: Jeff Vigil Title: CFO

Name: _____ Title: _____

Name: _____ Title: _____

Headquarters Address: 44 Union Boulevard, Suite 600

City, State, Zip: Lakewood, CO 80228

Phone: (303) 974-2140 Fax: (303) 974-2141

E-mail Address: _____

If Business is a Limited Liability Company: Member Managed (☐) Manager Managed (☐)

Name of 1st Member/Manager: _____ Title: _____

Business Address: _____

City, State, Zip: _____

Phone: _____ Fax: _____

E-mail Address: _____

Name of 2nd Member/Manager: _____ Title: _____

Business Address: _____

City, State, Zip: _____

Phone: _____ Fax: _____

E-mail Address: _____

If Business is a Partnership:

Names of Partners: _____

Business Address: _____

City, State, Zip: _____

Phone: _____ Fax: _____

E-mail Address: _____

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5. Ownership of Land Surface:

Private (Fee) ☐ BLM ☒ US Forest Service ☐
 State Trust Land/School Sections ☒ State Sovereign Lands ☐

Other (please describe):

Name BLM - Grand Junction Address 2815 H Road, Grand Junction, CO 81506
 Name BLM - Moab Address 82 East Dogwood, Moab, UT 84532
 Name Utah Trust Lands Address 675 E 500 South, Ste 500, Salt Lake City, UT 84102
 Name _____ Address _____

6. Ownership of Minerals:

Private (Fee) ☐ BLM ☒ US Forest Service ☐
 State Trust Land/School Sections ☒ State Sovereign Lands ☐

Other (please describe):

Name BLM - Grand Junction Address 2815 H Road, Grand Junction, CO 81506
 Name BLM - Moab Address 82 East Dogwood, Moab, UT 84532
 Name Utah Trust Lands Address 675 E 500 South, Ste 500, Salt Lake City, UT 84102
 Name _____ Address _____

BLM Claim Number(s): See Attachment A

Utah State Lease Number(s): ML49312

BLM/USFS Lease or Project File Number(s): _____

Name of Lessee(s): Energy Fuels Resources Corporation

7. **Have the above surface and mineral owners been notified in writing?** Yes ☒ No ☐
 If no, why not? _____

8. **Does the Entity have legal right to enter and conduct mining operations on the land covered by this notice?** Yes ☒ No ☐

Please be advised that if State Trust Lands are involved, notification to the Division of Oil, Gas and Mining alone does not satisfy the notification requirements of Mineral Leases upon State Trust Lands. Exploration or mining activity on State Trust Lands requires a minimum of 60 days notice to the Trust Lands Administration prior to commencing any activities. Please contact the School Institutional Trust Lands Administration (SITLA) at (801) 538-5508 for notification requirements.

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II. PROJECT LOCATION & MAP (Rule R647-3-105)

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1. **Project Location & Map** (legal description):

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County(ies): Grand County

- 1/4, of - 1/4, of SW 1/4, Section: 9 (PB42) Township: 25S Range: 26E
NE 1/4, of SE 1/4, of NW 1/4, Section: 9 (PB42) Township: 25S Range: 26E
NE 1/4, of NW 1/4, of NW 1/4, Section: 16 Township: 25S Range: 26E

UTM East: _____ (if known) UTM North: _____ (if known)

Name of Quad Map for Location: _____

2. **Is the project within an incorporated area?** ☐ Yes ☒ No
 If yes, what is the town or city? _____

3. **Location and Operations maps** must be plotted at a scale to accurately identify locational landmarks and operations details. All maps must include a north arrow, scale, appropriate labels, and title box including the mine name, township, range and section.
 - a. The **general location map** must be the scale of a USGS 7.5 minute series map or equivalent (1"=2000') and identify new or existing access roads.
 - b. The **operations map** (1"=200' or other scale as determined necessary by the Division) must be labeled and identify:
 - i. The area to be disturbed;
 - ii. The location of any existing or proposed operations including access roads, drill holes, trenches, pits, shafts, cuts, or other planned activities; and
 - iii. Any adjacent previous disturbance for which the operator is not responsible.(Contact the Division for a list of consultants and land surveyors for mapping assistance.)
4. The proposed (5 acre or less) disturbed area (including access/haul roads) should be marked ON THE GROUND with metal T-Posts (or with some other marker of equal effectiveness). Markers should be appropriately spaced so that the next marker in either direction is clearly visible with the naked eye.

III. **OPERATION PLAN** (Rule R647-3-106)

1. **Type of mining:** Surface () Underground (X)
2. **Mineral(s) to be mined:** Uranium/Vanadium
3. **Amount of material** to be extracted, moved, or proposed to be moved: Maximum of 50,000 ton
per year to be removed from portals in Colorado
4. Will any **water, liquid chemicals, reagents, or other solutions** be used, produced or discharged as part of the mining or milling process? Yes (X) No () If yes, please describe (add extra pages if needed): Mine dewatering and treatment will occur at portals in Colorado in accordance with CDPS Permit No. CO-0047562 (Attachment C). No water discharges will occur in Utah.
5. Provide a brief **description of the proposed mining operation**, and onsite processing facilities (add extra pages if necessary). All on-site surface facilities will be located in Colorado with the exception of six ventilation shafts and one meteorological tower. Additional details regarding the ventilation shafts and meteorological tower are provided in Attachments B and D, respectively.
6. () **New Road(s):** Length 0 (ft), Width _____ (ft)
7. () **Improved Road(s):** Describe improvements that need to be made to existing roads to access the site, including the Length 0 (ft) and Width _____ (ft) of new disturbances.
8. Total project surface **acreage to be disturbed:** 1.39 (acres) PLEASE SPECIFY EXACT ACREAGE (this will be used to determine surety bond amount – see #VI).
9. Proposed **startup date** (month, year): September 2011
10. Proposed **completion**, if known (month, year): Not known

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IV. OPERATION AND RECLAMATION PRACTICES (Rule R647-3-107, 108 & 109)

The reclamation and operation obligation is to keep the area clean and safe, minimize hazards to public safety, return the land to a useful condition, and reestablish at least 70 percent of the premining vegetative ground cover or within practical limits. To accomplish this, the Permittee / Operator will need to perform reclamation concurrently, or at the completion (within one (1) year) of mining. Please refer to The Practical Guide to Reclamation in Utah, available at::

https://fs.ogm.utah.gov/pub/MINES/Coal_Related/RecMan/Reclamation_Manual.pdf.

1. *Keep the mining operation in a safe, clean, and environmentally stable condition.*
2. *Permanently seal all shafts and tunnels to prevent unauthorized or accidental entry.*
3. *Plug drill holes with a five foot cement surface plug. Holes that encounter fluids are to be plugged in the subsurface to prevent aquifer contamination.*
4. *Construct berms, fences, or barriers, when needed, above highwalls and excavations.*
5. *Remove, isolate, or neutralize all toxic materials in a manner compatible with federal and state regulations.*
6. *Remove all waste or debris from stream channels.*
7. *Dispose of any trash, scrap metal, wood, machinery, and buildings.*
8. *Conduct mining activities so as to minimize erosion and control sediment.*
9. *Reclaim all roads that are not part of a permanent transportation system.*
10. *Stockpile topsoil and suitable overburden prior to mining.*
11. *Stabilize highwalls by backfilling or rounding to 45 degrees or less, where feasible; reshape the land to near its original contour, and redistribute the topsoil and suitable overburden.*
12. *Properly prepare seedbed to a depth of six inches by pocking, ripping, discing, or harrowing. Leave the surface rough.*
13. *Reseed disturbed areas with adaptable species. (The Division recommends a mixture of species of grass, forb, and browse seed, and will provide a specific species list if requested.)*
14. *Plant the seed with a rangeland or farm drill, or broadcast the seed. Fall is the preferred time to seed.*

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V. VARIANCE REQUEST (Rule R647-3-110)

Any variance must be approved writing *in advance* by the Division

Any planned deviations from Rules R647-3-107, Operation Practices, R647-3-108, Hole Plugging Requirements, or R647-3-109, Reclamation Practices, as summarized above (see IV. Operation and Reclamation Practices Item # 1-14), should be identified below listing applicable rule number. Give justification for the variance(s) and alternate methods or measures to be utilized to meet the intent of the rule. Written approval from the Division will be given, if the proposed alternative methods to be used are consistent with the Act.

Are variances being requested? Yes () No (X)

Variance Requested

Item # Applicable Rule

Justification: _____

Alternate methods or measure to be utilized: _____

Attach additional page(s) if more variances are requested.

VI. SURETY (Utah Code Ann. §40-8-7(1)[c])

A reclamation contract and surety must be provided to and approved by the Division prior to commencement of operations. No surface disturbance is authorized until the surety is posted and approved in writing. The surety may be provided in the form of a certificate of deposit, a letter of credit, a surety bond, or cash. Please contact the Division for further information about submitting the surety. All mining operations are required to furnish and maintain reclamation surety to guarantee that the land affected is reclaimed (Utah Code Ann. §40-8-7(1)[c]).

The reclamation surety amount is based on the nature, extent and duration of operations. The amounts are based on data from current large mine surety and are used as a general guide, along with actual site conditions. Reclamation surety for small mines is reviewed every three (3) or five (5) years and adjusted as necessary for inflation/deflation based upon acceptable Costs Index. **Contact the Division for the dollar amount required for a three (3) or five (5) year period for this project.**


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VIII. SIGNATURE REQUIREMENT

CERTIFICATION

I state under penalty of perjury under the laws of the state of Utah and the United States of America that:

- a. I have read this form and declare the information, statements and/or documentation are true, correct and complete to the best of my knowledge and belief; AND
- b. I commit to the reclamation of the aforementioned small mining project as required by the Utah Mined Land Reclamation Act (40-8) and the rules as specified by the Board of Oil, Gas and Mining.
- c. **This certification must be signed by:** (1.) an executive officer if the applicant is a corporation; (2.) a partner if applicant is a partnership (general or limited); (3.) the owner if applicant is a sole proprietorship; or (4.) the member or manager if applicant is a limited liability company.

Signature:  Date: 8/19/2011
Name (typed or printed): Stephen P. Antony
Title/Position (if applicable): Chief Executive Officer and President

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Attachment A

BLM Claims

The mine is located entirely on public land managed by the BLM. The mineral rights are controlled through unpatented mining claims, which are illustrated on Figure A-1.

Energy Fuels has legal right to enter through the provisions of the 1872 Mining Law, claims held by Energy Fuels, and long-term lease agreements with the other claim holders. Following is a list of claims associated with the Whirlwind Mine.

Table A-1

Claims Held By Energy Fuels Resources Corporation			
Number	Claim Name	Claim ID	County, State
1	Christmas #9	CMC264971	Mesa County, Colorado
2	Christmas #10	CMC264972	Mesa County, Colorado

Claims on Lease With Little Maverick Mining Company			
Number	Claim Name	Claim ID	County, State
1	Far West Wind-#1	CMC259552	Mesa County, Colorado
2	Far West Wind-#2	CMC259553	Mesa County, Colorado
3	Far West Wind-#3	CMC259554	Mesa County, Colorado
4	Far West Wind-#4	CMC259555	Mesa County, Colorado
5	Far West Wind-#5	CMC259556	Mesa County, Colorado
6	Whirlwind #2	CMC253218	Mesa County, Colorado
7	Whirlwind #3	CMC253115	Mesa County, Colorado
8	Whirlwind #4	CMC253114	Mesa County, Colorado
9	Whirlwind #5	CMC253113	Mesa County, Colorado
10	Whirlwind #6	CMC253217	Mesa County, Colorado
11	Whirlwind #13	CMC253116	Mesa County, Colorado
12	Whirlwind #18	CMC254341	Mesa County, Colorado
13	Whirlwind #19	CMC254340	Mesa County, Colorado
14	Whirlwind #21	CMC253216	Mesa County, Colorado
15	Whirlwind #22	CMC253215	Mesa County, Colorado
16	Whirlwind #25	CMC253214	Mesa County, Colorado
17	Whirlwind #26	CMC253213	Mesa County, Colorado
18	Whirlwind #27	CMC253212	Mesa County, Colorado
19	Whirlwind Tunnel Site	CMC253117	Mesa County, Colorado
20	Whirlwind #30	CMC259550	Mesa County, Colorado
21	Whirlwind #35	CMC259551	Mesa County, Colorado

Claims on Lease With Little Maverick Mining Company			
Number	Claim Name	Claim ID	County, State
22	Whirlwind #39	CMC259506	Mesa County, Colorado
23	Whirlwind #40	CMC259507	Mesa County, Colorado
24	Whirlwind #41	CMC259508	Mesa County, Colorado
25	Whirlwind #42	CMC259509	Mesa County, Colorado
26	Whirlwind #43	CMC259510	Mesa County, Colorado
27	Whirlwind #44	CMC259511	Mesa County, Colorado
28	Whirlwind #45	CMC259512	Mesa County, Colorado
29	Whirlwind #20	CMC259505	Mesa County, Colorado
30	Far West Wind-#6	UMC385429	Grand County, Utah
31	Far West Wind-#7	UMC385430	Grand County, Utah
32	Far West Wind-#8	UMC385431	Grand County, Utah
33	Far West Wind-#9	UMC385432	Grand County, Utah
34	Far West Wind-#10	UMC385433	Grand County, Utah
35	Far West Wind-#11	UMC385434	Grand County, Utah
36	Far West Wind-#12	UMC385435	Grand County, Utah
37	Far West Wind-#13	UMC385436	Grand County, Utah
38	Whirlwind #7	UMC373478	Grand County, Utah
39	Whirlwind #8	UMC373479	Grand County, Utah
40	Whirlwind #9	UMC373480	Grand County, Utah
41	Whirlwind #10	UMC373481	Grand County, Utah
42	Whirlwind #14	UMC373482	Grand County, Utah
43	Whirlwind #7 Ext.	UMC375326	Grand County, Utah
44	Whirlwind #11	UMC375327	Grand County, Utah
45	Whirlwind #12	UMC375328	Grand County, Utah
46	Whirlwind #15	UMC375329	Grand County, Utah
47	Whirlwind #16	UMC375330	Grand County, Utah
48	Whirlwind #17	UMC375331	Grand County, Utah
49	Whirlwind #28	UMC385420	Grand County, Utah
50	Whirlwind #29	UMC385421	Grand County, Utah
51	Whirlwind #31	UMC385422	Grand County, Utah
52	Whirlwind #32	UMC385423	Grand County, Utah
53	Whirlwind #33	UMC385424	Grand County, Utah
54	Whirlwind #34	UMC385425	Grand County, Utah
55	Whirlwind #36	UMC385426	Grand County, Utah
56	Whirlwind #37	UMC385427	Grand County, Utah
57	Whirlwind #38	UMC385428	Grand County, Utah

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Claims on Lease With S & S Mining Company			
Number	Claim Name	Claim ID	County, State
1	Christmas #1	CMC262339	Mesa County, Colorado
2	Christmas #2	CMC262340	Mesa County, Colorado
3	Christmas #3	CMC262341	Mesa County, Colorado
4	Christmas #4	CMC262342	Mesa County, Colorado
5	Christmas #5	CMC262343	Mesa County, Colorado
6	Christmas #6	CMC262344	Mesa County, Colorado
7	Christmas #7	CMC262345	Mesa County, Colorado
8	Christmas #8	CMC262346	Mesa County, Colorado
9	Whirlwind #140 amended	CMC259513	Mesa County, Colorado
10	Whirlwind #141 amended	CMC259514	Mesa County, Colorado
11	Whirlwind #142 amended	CMC259515	Mesa County, Colorado
12	Whirlwind #143 amended	CMC259516	Mesa County, Colorado
13	Whirlwind #144 amended	CMC259517	Mesa County, Colorado
14	Whirlwind #145 amended	CMC259518	Mesa County, Colorado
15	Whirlwind #146 amended	CMC259519	Mesa County, Colorado
16	Whirlwind #147 amended	CMC259520	Mesa County, Colorado
17	Farwest #15	UMC387227	Grand County, Utah
18	Farwest #16	UMC387228	Grand County, Utah
19	Farwest #17	UMC387229	Grand County, Utah
20	Farwest #18	UMC387230	Grand County, Utah
21	Farwest #19	UMC387231	Grand County, Utah
22	Farwest #20	UMC387232	Grand County, Utah
23	Farwest #21	UMC387233	Grand County, Utah
24	Farwest #22	UMC387234	Grand County, Utah
25	Farwest #23	UMC387235	Grand County, Utah
26	Farwest #24	UMC387236	Grand County, Utah
27	Farwest #25	UMC387237	Grand County, Utah
28	Farwest #26	UMC387238	Grand County, Utah
29	Farwest #27	UMC387239	Grand County, Utah
30	Farwest #28	UMC387240	Grand County, Utah
31	Farwest #29	UMC387241	Grand County, Utah
32	Farwest #30	UMC387242	Grand County, Utah
33	Farwest #31	UMC387243	Grand County, Utah

Claims on Lease With S & S Mining Company			
Number	Claim Name	Claim ID	County, State
34	Farwest #32	UMC387244	Grand County, Utah
35	Farwest #33	UMC387245	Grand County, Utah
36	Farwest #34	UMC387246	Grand County, Utah
37	Farwest #37	UMC387249	Grand County, Utah
38	Farwest #38	UMC387250	Grand County, Utah
39	Farwest #39	UMC387251	Grand County, Utah
40	Farwest #40	UMC387252	Grand County, Utah
41	Farwest #41	UMC387253	Grand County, Utah
42	Farwest #42	UMC387254	Grand County, Utah
43	Farwest #43	UMC387255	Grand County, Utah
44	Farwest #44	UMC387256	Grand County, Utah
45	Farwest #45	UMC387257	Grand County, Utah
46	Farwest #46	UMC387258	Grand County, Utah
47	Farwest #47	UMC387259	Grand County, Utah
48	Farwest #48	UMC387260	Grand County, Utah
49	Farwest #49	UMC387261	Grand County, Utah
50	Farwest #50	UMC387262	Grand County, Utah
51	Farwest #51	UMC387263	Grand County, Utah
52	Farwest #52	UMC387264	Grand County, Utah
53	Farwest #53	UMC387265	Grand County, Utah
54	Farwest #54	UMC387266	Grand County, Utah
55	Farwest #55	UMC387267	Grand County, Utah
56	Farwest #56	UMC387268	Grand County, Utah
57	Farwest #57	UMC387269	Grand County, Utah
58	Farwest #58	UMC387270	Grand County, Utah
59	Farwest #59	UMC387271	Grand County, Utah
60	Farwest #60	UMC387272	Grand County, Utah
61	Farwest #61	UMC387273	Grand County, Utah
62	Farwest #62	UMC387274	Grand County, Utah
63	Farwest #63	UMC387275	Grand County, Utah
64	Farwest #64	UMC387276	Grand County, Utah
65	Farwest #65	UMC387277	Grand County, Utah
66	Farwest #66	UMC387278	Grand County, Utah
67	Farwest #67	UMC387279	Grand County, Utah
68	Farwest #68	UMC387280	Grand County, Utah
69	Farwest #69	UMC387281	Grand County, Utah
70	Farwest #70	UMC387282	Grand County, Utah
71	Farwest #71	UMC387283	Grand County, Utah
72	Farwest #72	UMC387284	Grand County, Utah
73	Farwest #73	UMC387285	Grand County, Utah
74	Farwest #74	UMC387286	Grand County, Utah

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Claims on Lease With S & S Mining Company			
Number	Claim Name	Claim ID	County, State
75	Farwest #75	UMC387287	Grand County, Utah
76	Farwest #76	UMC387288	Grand County, Utah
77	Farwest #77	UMC387289	Grand County, Utah
78	Farwest #78	UMC387290	Grand County, Utah
79	Farwest #79	UMC387291	Grand County, Utah
80	Farwest #80	UMC387292	Grand County, Utah
81	Farwest #81	UMC387293	Grand County, Utah
82	Farwest #82	UMC387294	Grand County, Utah
83	Farwest #83	UMC387295	Grand County, Utah
84	Farwest #84	UMC387296	Grand County, Utah
85	Farwest #85	UMC387297	Grand County, Utah
86	Farwest #86	UMC387298	Grand County, Utah
87	Farwest #87	UMC387299	Grand County, Utah
88	Farwest #88	UMC387300	Grand County, Utah
89	Farwest #89	UMC387301	Grand County, Utah
90	Farwest #90	UMC387302	Grand County, Utah
91	Farwest #91	UMC387303	Grand County, Utah
92	Farwest #92	UMC387304	Grand County, Utah
93	Farwest #93	UMC387305	Grand County, Utah
94	Farwest #94	UMC387306	Grand County, Utah
95	Farwest #95	UMC387307	Grand County, Utah
96	Farwest #96	UMC387308	Grand County, Utah
97	Farwest #97	UMC387309	Grand County, Utah
98	Farwest #98	UMC387310	Grand County, Utah
99	Farwest #99	UMC387311	Grand County, Utah
100	Farwest #100	UMC387312	Grand County, Utah
101	Farwest #101	UMC387313	Grand County, Utah
102	Farwest #102	UMC387314	Grand County, Utah
103	Farwest #103	UMC387315	Grand County, Utah
104	Farwest #104	UMC387316	Grand County, Utah
105	Farwest #105	UMC387317	Grand County, Utah
106	Farwest #106	UMC387318	Grand County, Utah
107	Farwest #107	UMC387319	Grand County, Utah
108	Farwest #108	UMC387320	Grand County, Utah
109	Farwest #109	UMC387321	Grand County, Utah
110	Farwest #110	UMC387322	Grand County, Utah
111	Farwest #111	UMC387323	Grand County, Utah
112	Farwest #112	UMC387324	Grand County, Utah

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Claims on Lease With High Country Mining			
Number	Claim Name	Claim ID	County, State
1	Crosswind #40	CMC254299	Mesa County, Colorado
2	Crosswind #41	CMC254300	Mesa County, Colorado
3	Crosswind #42	CMC254301	Mesa County, Colorado
4	Crosswind #43	CMC254302	Mesa County, Colorado
5	Crosswind #44	CMC254303	Mesa County, Colorado
6	Crosswind #45	CMC254304	Mesa County, Colorado
7	Crosswind #46	CMC254305	Mesa County, Colorado
8	Crosswind #47	CMC254306	Mesa County, Colorado
9	Crosswind #48	CMC254307	Mesa County, Colorado
10	Crosswind #49	CMC254308	Mesa County, Colorado
11	Crosswind #50	CMC254309	Mesa County, Colorado
12	Crosswind #51	CMC254310	Mesa County, Colorado
13	Crosswind #52	CMC254311	Mesa County, Colorado
14	Crosswind #53	CMC254312	Mesa County, Colorado
15	Crosswind #54	CMC254313	Mesa County, Colorado
16	Crosswind #55	CMC254314	Mesa County, Colorado
17	Crosswind #56	CMC254315	Mesa County, Colorado
18	Crosswind #57	CMC254316	Mesa County, Colorado
19	Crosswind #58	CMC254317	Mesa County, Colorado
20	Crosswind #59	CMC254318	Mesa County, Colorado
21	Crosswind #60	CMC254319	Mesa County, Colorado
22	Crosswind #61	CMC254320	Mesa County, Colorado
23	Crosswind #62	CMC254321	Mesa County, Colorado
24	Crosswind #63	CMC254322	Mesa County, Colorado
25	Crosswind #64	CMC254323	Mesa County, Colorado
26	Crosswind #65	CMC254324	Mesa County, Colorado
27	Crosswind #66	CMC254325	Mesa County, Colorado
28	Crosswind #67	CMC254326	Mesa County, Colorado
29	Crosswind #68	CMC254330	Mesa County, Colorado
30	Crosswind #69	CMC254329	Mesa County, Colorado
31	Crosswind #70	CMC254328	Mesa County, Colorado
32	Crosswind #71	CMC254327	Mesa County, Colorado
33	Crosswind #72	CMC254331	Mesa County, Colorado
34	Crosswind #73	CMC254332	Mesa County, Colorado
35	Crosswind #74	CMC254333	Mesa County, Colorado
36	Crosswind #75	CMC254334	Mesa County, Colorado
37	Crosswind #76	CMC254335	Mesa County, Colorado
38	Crosswind #77	CMC254336	Mesa County, Colorado
39	Crosswind #78	CMC254337	Mesa County, Colorado
40	Crosswind #79	CMC254338	Mesa County, Colorado

Claims on Lease With High Country Mining			
Number	Claim Name	Claim ID	County, State
41	Crosswind #80	CMC254339	Mesa County, Colorado
42	Crosswind #81	CMC259558	Mesa County, Colorado
43	Crosswind #82	CMC259559	Mesa County, Colorado
44	Crosswind #83	CMC259560	Mesa County, Colorado
45	Crosswind #84	CMC259561	Mesa County, Colorado

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Attachment B
Ventilation Shafts

Vent Shaft Information

One existing vent shaft, the 10-Straight Vent Shaft, is currently located in Colorado and accesses the west portion of the Packrat Mine. As the mine expands, seven ventilation shafts will be added as shown on Figure 2 for a total of eight ventilation shafts. Six of the proposed vent shafts, U-1 through U-6, will be located in Utah. The location of these vent shafts may change by several hundred feet depending on the ultimate location of the drift and ventilation needs. Rehabilitation of the existing mine portals and declines and construction of the vent shaft in Colorado will take place prior to construction of the proposed vent shafts in Utah. Energy Fuels estimates that the first ventilation shaft in Utah will be constructed no earlier than the third quarter of 2008.

A concrete pad up to 200 square feet in size and a thickness of 6" will be constructed at each new vent shaft to provide a level platform for drilling equipment during installation. Prior to installation of the pad, topsoil will be stripped to a depth of a minimum of 12 inches and the material will be stockpiled at the perimeter of the pad for later use in reclamation. These small piles will be seeded since they will be present for a number of years. The pad may be constructed in the form of a donut where the central area is left open for the shaft. The ventilation shaft opening will be up to 6 feet in diameter. The shaft will be cased and also grouted as necessary through aquifers to prevent groundwater inflow into the vent shaft.

Once the shafts are completed and cased, a single-vane axial fan with a diffuser will be mounted on top of each hole. These units are typically about three to five feet high and have metal grates on top. Taller diffusers may be installed if additional noise reduction is required. They will be painted a color, approved by the BLM, which blends in with the surroundings. The fans will be powered by electricity from nearby power poles and each unit will have locked breaker boxes at the power drop. Surface disturbance at each vent

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shaft is conservatively estimated to be 0.23 acres (based on a 100-foot square area) consisting of a small pad area and a short 15-foot-wide, two-track access road.

Vent Shaft Power Supply

The local power companies (San Miguel Power and Rocky Mountain Power) will supply electricity to the site using the existing power poles and lines for the most part. Some additional poles and transformers will be needed and temporary generators may be used at some vent shafts until electrical power is established in this area.

Vent Shaft Access

Vent shafts will be located as close as possible to existing county access roads. The area of vent shaft access roads are included in the 0.23-acre disturbance areas. Existing BLM roads will be used to access vent shafts U1, U2, U3, U4, and U6. Vent shaft U5 is located adjacent to an existing County Road. The vent shaft access roads will be two-track overland roads that will only be used for periodic inspections and maintenance (i.e., average of once per day) by Energy Fuels personnel. See Figure 3 for the locations of existing county access and BLM roads.

Vent Shaft Reclamation

Energy Fuels estimates that each vent shaft will cost approximately \$7,300 to reclaim. This estimated cost is based on digging down four to six feet deep around each hole and cutting the casing off at three to four feet below the ground surface. After the casing is cut off, a steel plate is welded over the opening and structural steel (i.e., small I-beams and rebar) is welded over the top of the steel plate to form a six-inch-thick, reinforced square cover. Concrete is poured between the I-beams and around the rebar to complete the installation. A minimum of three feet of soil is then placed over the cover. The concrete pad is broken and dropped down the vent shaft. The diffuser is hauled off-site for re-use or disposal.

At the time of reclamation, different methods may be used to close the mine shafts that meet state and BLM requirements and may have technical and financial advantages over

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current techniques and materials. For example, polyurethane foam plugs for mine shafts is an emerging technology that could be the preferred standard in the future. Energy Fuels will consult with the agencies at the time of closure to verify preferred closure methods.

The disturbed areas will be reclaimed to dry rangeland for wildlife habitat, which is the primary post mining land use. After shaft sealing, the topsoil which was previously stockpiled at each shaft location will be replaced and graded. The area will then be seeded and mulched. Assuming an average topsoil depth of 12 inches, approximately 370 cubic yards of topsoil will be placed.

Table B-1
Estimated Cost for Vent Shaft Reclamation

Description	Unit Cost (\$/shaft)	Total Cost ^(a) (\$)
Sealing of Vent Shaft ^(b)	\$5,900	\$35,4000
Diffuser disposal ^(c)	\$500	\$3,000
Earthwork ^(d)	\$555	\$3,330
Seeding and Mulching ^(e)	\$345	\$2,070
Total	\$7,300	\$43,800

Notes:

- (a) Based on reclamation of six vent shafts in Utah.
- (b) Based on a 6'x6' cover and 1 hour of mobilization/demobilization, 1 hour to break concrete and dump in shaft, 1 hour of excavation, 6 hours for cutting and welding, and 4 hours for concrete mixing and pouring, per vent shaft.
- (c) Based on 4 hours each for two common laborers and typical disposal fees.
- (d) Based on 370 cubic yards (CY) at \$1.50/CY.
- (e) Based on 0.23 acre at \$1,500/acre, allowing for a 50% reseeding rate.

Energy Fuels proposes to incrementally bond for the vent shafts. That is, post a reclamation bond for the first vent shaft when this notice of intent is approved, post bond for the second vent shaft when construction of the first is completed, and so on. Energy Fuels estimates that the first ventilation shaft in Utah will be constructed no earlier than late 2008.

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Attachment D
Meteorological Tower

Meteorological Tower Information

The meteorological tower (met tower) will be installed for the purpose of collecting site-specific wind speed and direction data to be used in modeling radon dose estimates to the nearest public receptor at the Whirlwind Mine in accordance with 40 CFR Part 61, Subpart B. The met tower will be 10 meters high and equipped with a wind monitor and data logger. Security for the tower requires installation of an 6-foot high chain link fence around the tower.

The proposed met tower location is on a Utah State Section, managed by the Utah School and Institutional Trust Lands Administration (SITLA, see Figure 1). The proposed met tower location is in a relatively large clearing, which is required to collect representative wind measurements. The location in this clearing was selected to optimize its distance from nearby obstructions (i.e., trees) that may interfere with wind patterns. Energy Fuels anticipates that the met tower will be constructed this fall.

A concrete foundation measuring approximately 5.5 square feet in area (2'4" x 2'4") and a depth of 4' will be constructed to support the tower. Prior to installation of the foundation, topsoil will be stripped to a depth of a minimum of 12 inches and the material will be stockpiled near the foundation for later use in reclamation. This small topsoil stockpile will be seeded since it will be present for a number of years.

The tower will have a triangular cross section measuring approximately 14 inches on a side at the base. Once the tower is installed, a wind monitor and data logger will be attached to it. This equipment is small in size and is attached directly to the tower. The equipment will be powered by battery and will not require external power. Fencing will be installed around the tower to deter damage and vandalism. The fencing will be 6-foot high chainlink fence measuring 8 feet by 8 feet.

Surface disturbance at each vent shaft is minimal and conservatively estimated to be less than 0.01 acres (equivalent to a 20-foot by 20-foot area) consisting of the tower foundation and fence. An access road will not be required as the tower will be located near an existing access road (100 to 200 feet north of the tower) and constructed by hand with aid of a small skid steer, causing minimal disturbance in a sparsely vegetated area.

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Meteorological Tower Reclamation

Energy Fuels estimates that the met tower will cost approximately \$955 to reclaim. This estimated cost is based on removing the met tower, instruments, foundation and fencing. The resulting depression is then filled with soil and topped with topsoil. The area will then be seeded and mulched. The estimate assumes that the work will be completed with two laborers and a small skid steer.

Table D-1
Estimated Cost for Met Tower Reclamation

Description	Total Cost
Removal of Equipment and Foundation ^(a)	\$640
Disposal of Equipment and Foundation ^(b)	\$300
Seeding and Mulching ^(c)	\$15
Total	\$955

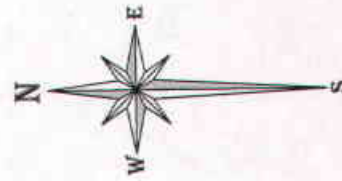
Notes:

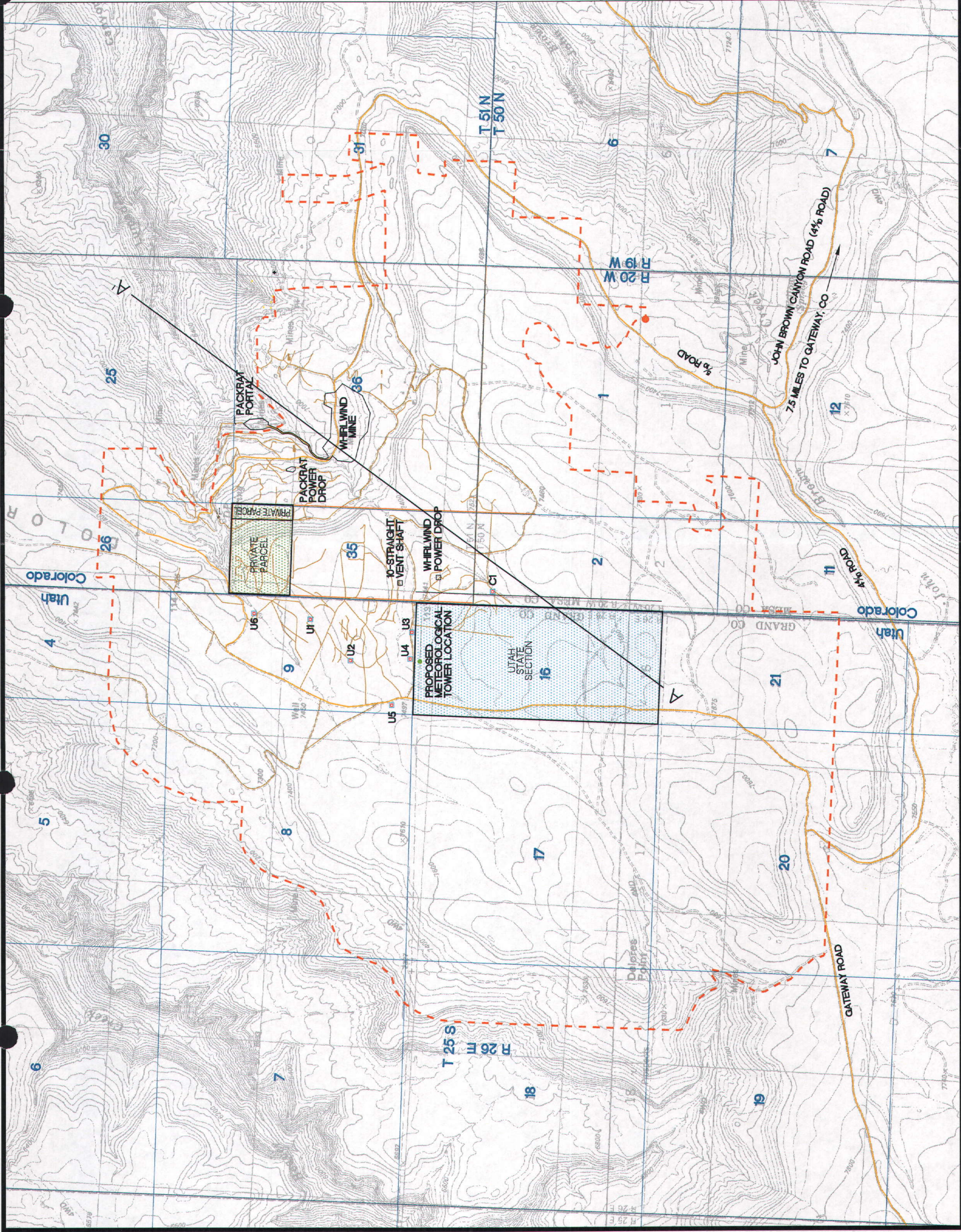
- (a) Based on 1 hour of mobilization/demobilization, 2 hours to disassemble and cut the tower and fencing and 1 hour to dig out and remove concrete.
- (b) Based on 4 hours for one common laborer and typical disposal fees.
- (c) Based on 0.01 acre at \$1,500/acre, allowing for a 50% reseeding rate.

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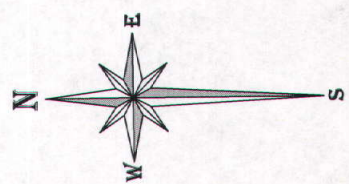


- LIMIT OF UNDERGROUND MINING
- COUNTY ACCESS ROAD
- BLM ROAD
- PROPOSED VENT SHAFT PAD AREA
- EXISTING VENT SHAFT OR POWER DROP PAD AREA
- PROPOSED METEOROLOGICAL TOWER LOCATION
- LAND AND MINERAL RIGHTS NOT CONTROLLED BY ENERGY FUELS
- UTAH STATE SECTION

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1000' 0 1000' 2000'
SCALE 1" = 2000'

NOTE: ORIGINAL MAP FROM
UMETCO TO CDPHE
AUG, 1995

Energy Fuels Resources

FIGURE 2
WHIRLWIND MINE
PERMIT BOUNDARY

Location: Section 9, T 25 S, R 26 E
Drawn: August 18, 2011
Drawn by: ZTR

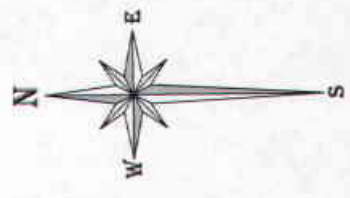


- COUNTY ACCESS ROAD
- BLM ROAD
- PROPOSED VENT SHAFT PAD AREA
- EXISTING VENT SHAFT OR POWER DROP PAD AREA
- PROPOSED METEOROLOGICAL TOWER LOCATION
- LAND AND MINERAL RIGHTS NOT CONTROLLED BY ENERGY FUELS
- UTAH STATE SECTION
- EXISTING MINE WORKINGS
- PROPOSED EXPANSION

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NOTE: ORIGINAL MAP FROM UMETCO TO CDPHE AUG, 1995

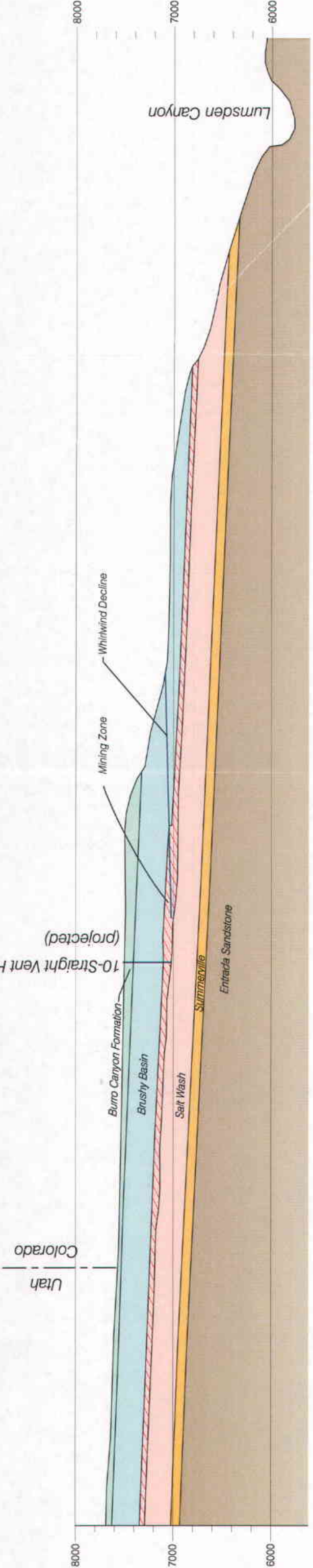
Energy Fuels Resources

FIGURE 3
WHIRLWIND MINE
SITE PLAN

Sheet 1 of 1
August 18, 2011
2/11

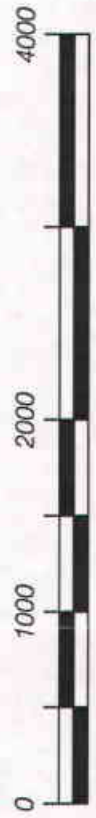
A

A'



EXPLANATION	
Lower Cretaceous	Kbc Burro Canyon formation White, gray, and red sandstone and conglomerate with interbedded red and green mudstone and minor amounts of dense gray cherty limestone.
	Jmb Brushy Basin Member
	Jms Salt Wash Member
Upper Jurassic	Morrison formation Variegated mudstone and shale; grayish-yellow, very pale orange, and white sandstone; local thin limestone beds. Brushy Basin member, Jmb, consisting of bentonitic mudstone and shale, but including some sandstone and conglomerate lenses. Salt Wash member, Jms, consisting of interbedded sandstone and red and green mudstone.
	Js Summerville formation Thin-bedded red, green, and brown sandy and silty shale and mudstone.

SECTION A-A' SHOWING GEOLOGIC FORMATIONS



Scale: 1" = 1000 Feet



Note: This drawing was adapted from geologic cross section presented in August 30, 1995 from John Hamrick, Umetco to Patricia Nelson, Colorado Water Quality Control Division regarding Draft Permit No. CO-0043575.

Figure 4

GEOLOGIC CROSS SECTION

OF BEAVER MESA

Scale	As Shown	Drawn by	Jan. 3, 08	Sted
-------	----------	----------	------------	------

Attachment C

Colorado Discharge Permit System (CDPS) Discharge

Permit No. CO-0047562 for the Whirlwind Mine

DEC 10 2007

STATE OF COLORADO

Bill Ritter, Jr., Governor
James B. Martin, Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. S.
Denver, Colorado 80246-1530
Phone (303) 692-2000
TDD Line (303) 691-7700
Located in Glendale, Colorado

Laboratory Services Division
8100 Lowry Blvd.
Denver, Colorado 80230-6928
(303) 692-3090

<http://www.cdphs.state.co.us>



Colorado Department
of Public Health
and Environment

December 6, 2007

Stephen P. Antony, Executive Vice President
Energy Fuel Resources
31525 Road 90
Nucla, CO 81424

**RE: Amended Permit, Colorado Wastewater Discharge Permit System
Permit Number: CO-047562**

Dear Mr. Antony

Enclosed please find a copy of the **amendment to your existing permit**, which was issued under the Colorado Water Quality Control Act. You are legally obligated to comply with all terms and conditions of the permit.

Please read the amendment and if you have any questions, contact me at (303) 692-3590.

Sincerely,

Debbie Jessop, Administrative Assistant
Water Quality Protection Section
WATER QUALITY CONTROL DIVISION

Enclosure

xc: Gregory Davis, Permit Team, Environmental Protection Agency (8P2W-P)
Regional Council of Government
Mesa County, Local County Health Department
Mark Kadnuck, D.E., Technical Services Unit, WQCD
Permit File
Permit Fees

/lh

amd-permit

RECEIVED DEC 16 2007

COLORADO DISCHARGE PERMIT SYSTEM (CDPS)

RATIONALE FOR MINOR MODIFICATION #1

**ENERGY FUEL RESOURCES CORPORATION, WHIRLWIND PROJECT
CDPS PERMIT NUMBER CO-0047562, MESA COUNTY**

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III. PURPOSE OF MODIFICATION	2
IV. CHANGES MADE TO PERMIT	2

I. TYPE OF PERMIT

Industrial Major, Minor Modification #1

II. FACILITY INFORMATION

- A. Facility Type:** *Hardrock Mining*
Fee Category: *Category 03, Subcategory 1*
Category Flow Range: *Mine dewatering from 0 up to 49,999 gpd*
Annual Fee: *\$ 1140 (effective July 1, 2007)*
Modification Fee: *\$ 0*
- B. SIC Code:** *1094 (Uranium, Radium and Vanadium Ores)*
- C. Legal Contact:** *Stephen P. Antony, Executive Vice President and Chief Operating Officer
31525 Road 90
Nucla, CO 81424
303-974-2140*
- D. Facility Contact:** *Tim Pierce*
- E. Facility Location:** *30100 5/10 Road
Gateway, CO 81522
970-864-7775*
- F. Discharge Point:** *Outfall 001A, following treatment and prior to entering the middle tributary of Lumsden Creek.
Outfall MON1, at the same physical location as Outfall 001A, but referring to parameters that have monitor only requirements.*
- G. Facility Flows:** *0.03 MGD*
- H. CMLRB Permit No.:** *P-2005-008, P-2007-003*

MODIFIED DECEMBER 6, 2007 EFFECTIVE JANUARY 1, 2008 EXPIRATION AUGUST 31, 2012

III. PURPOSE OF MODIFICATION

The permittee brought to the Division's attention that the 30-day average and daily maximum limitations for total radium 226 appear to be switched in the issued permit. The 30-day maximum limitation was listed as 30 pCi/l, while the daily maximum limitation was 5 pCi/l.

IV. CHANGES MADE TO THE PERMIT

In double checking the regulations, the Federal Effluent Limitation Guidelines (ELG) for total radium are 10 pCi/l and 30 pCi/l as a 30-day average and a daily maximum, respectively. Regulation 31.11 states that the limitation for radium is in the form of total radium 226 + 228, and is 5 pCi/l as a daily maximum. As this limit is more stringent than the ELG, compliance with this limit therefore assures compliance with the ELG.

The permit also contains a limitation of 3 pCi/l as a 30-day average and 10 pCi/l as a daily maximum for dissolved radium 226, which is also based upon a Federal ELG. Instigation of the limitation of 5 pCi/l as a daily maximum for total radium 226 + 228 is also protective of the daily maximum for this ELG. Therefore, the daily maximum limit for dissolved radium 226 has been removed. The 30-day limitation will still apply.

In summary, the 30-day average and daily maximum limitations for total radium have been replaced in the permit with a daily maximum limitation of 5 pCi/l for total radium 226 + 228, based upon Regulation 31.11. The daily maximum limitation for dissolved radium 226 has been removed.

These changes have been made to Part I.A.1 of the permit, for the limitations at Outfall 001A. Also, changes have been made to Part I.B.1 of the permit, to the monitoring frequency tables, to update the parameter names.

Andrew J. Neuhart
December 5, 2007

AUTHORIZATION TO DISCHARGE UNDER THE COLORADO DISCHARGE PERMIT SYSTEM

In compliance with the provisions of the Colorado Water Quality Control Act, (25-8-101 et seq., CRS, 1973 as amended) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq.; the "Act") the

Energy Fuel Resources Corporation

is authorized to discharge from the Whirlwind Project wastewater treatment facility located at S 1/2 of NW 1/4 Section 36, T51N, R20W, NMPM; at 30100 5/10 Road, Gateway, CO 81522; Latitude 38 38.5' N, Longitude 109 2.9'W. to the middle fork of Lumsden Creek in accordance with effluent limitations, monitoring requirements and other conditions set forth in Part I and II hereof. All discharges authorized herein shall be consistent with the terms and conditions of this permit.

The applicant may demand an adjudicatory hearing within thirty (30) days of the issuance of the final permit determination, per the Colorado Discharge Permit System Regulations, 61.7(1). Should the applicant choose to contest any of the effluent limitations, monitoring requirements or other conditions contained herein, the applicant must comply with Section 24-4-104 CRS and the Colorado Discharge Permit System Regulations. Failure to contest any such effluent limitation, monitoring requirement, or other condition, constitutes consent to the condition by the Applicant.

This permit and the authorization to discharge shall expire at midnight August 31, 2012.

Minor Modification #1 Issued and Signed this 6TH day of December, 2007

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT



**Janet Kieler, Permits Section Manager
Water Quality Control Division**

Permit Actions Summary:

Minor Modification #1, Issued December 6, 2007 Effective January 1, 2008, (Part I.A.1 and Part I.B.1)
Originally Issued July 30, 2007, Effective September 1, 2007

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PART I

A. DEFINITION OF EFFLUENT LIMITATIONS

1. Effluent Limitations

Beginning no later than the effective date of this permit and lasting through the expiration date, the permittee is authorized to discharge from outfall(s): 001A and MON1.

In accordance with the Water Quality Control Commission Regulations for Effluent Limitations, Section 62.4, and the Colorado Discharge Permit System Regulations, Section 61.8(2), 5 C.C.R. 1002-61, the permitted discharge shall not contain effluent parameter concentrations which exceed the following limitations specified below or exceed the specified flow limitation.

Outfall 001A

Effluent Parameter

	<u>Maximum Concentrations</u>		
	<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Daily Maximum</u>
Flow, MGD	0.03	NA	Report
Chemical Oxygen Demand, mg/l	100	NA	200
Total Suspended Solids (TSS), mg/l	20	NA	30
pH, s.u. (minimum-maximum)	NA	NA	6.5-9 d/
Oil and Grease, mg/l	NA	NA	10 d/
Total Dissolved Solids, mg/l	Report	NA	Report
Whole Effluent Toxicity, Chronic Lethality	NA	NA	Statistical Difference & IC25 \geq IWC
Total Arsenic, μ g/l	100	NA	Report
Total Recoverable Cadmium, μ g/l	10	NA	Report
Total Recoverable Manganese, μ g/l	200	NA	Report
Total Recoverable Selenium, μ g/l	20	NA	Report
Total Recoverable Zinc, μ g/l	500	NA	1,000
Total Uranium, ug/l	700	NA	1,100
Dissolved Radium 226, pCi/l	3	NA	NA
Total Radium 226 +228, pCi/l	NA	NA	5

Outfall MON1

Effluent Parameter

	<u>Maximum Concentrations</u>		
	<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Daily Maximum</u>
Boron, mg/l	Report	NA	Report
Total Recoverable Beryllium, ug/l	Report	NA	Report
Total Recoverable Trivalent Chromium, ug/l	Report	NA	Report
Total Recoverable Lead, ug/l	Report	NA	Report
Total Recoverable Nickel, ug/l	Report	NA	Report
Total Recoverable Vanadium, ug/l	Report	NA	Report
Weak Acid Dissociable Cyanide, mg/l	Report	NA	Report

There shall be no discharge of floating solids.

2. Whole Effluent Toxicity - Chronic Lethality Limitation

Beginning on the effective date and lasting through the expiration date, there shall be no statistically significant difference in lethality (at the 95% confidence level) between the control and any effluent concentration less than or equal to 100.00% effluent. Such limitation shall apply as a daily maximum.

See Part I.C. for Definitions.

3. Chronic WET Testing-Outfall(s): 001A

a. Testing and Reporting Requirements

Tests shall be done at the frequency listed in Part I.B.1. Test results shall be reported along with the Discharge Monitoring Report (DMR) submitted for the reporting period during which the sample was taken. (i.e., WET testing results for the first calendar quarter ending March 31 shall be reported with the DMR due April 28.) The results shall be submitted on the Chronic Toxicity Test report form, available from the Division. Copies of these reports are to be submitted to both the Division and EPA along with the DMR.

The permittee shall conduct each chronic WET test in general accordance with methods described in Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, EPA/600/4-89/001 or the most current edition, except as modified by the most current Division guidance document entitled Guidelines for Conducting Whole Effluent Toxicity Tests. The permittee shall conduct such tests using *Ceriodaphnia dubia* and fathead minnows.

b. Failure of Test and Division Notification

Beginning on the effective date of the permit, a chronic WET test is failed whenever there is a statistically significant difference in lethality between the control and any effluent concentration less than or equal to the instream waste concentration (IWC). The IWC for this permit has been determined to be 100%. The permittee must provide written notification of the failure of a WET test to the Division, along with a statement as to whether a Preliminary Toxicity Investigation (PTI)/Toxicity Identification Evaluation (TIE) or accelerated testing is being performed. Notification must be received by the Division within 21 calendar days of the demonstration of chronic WET in the routine required test. Demonstration for the purposes of Parts I.A.3.b., c., d., e. and g. means no later than the last day of the laboratory test.

c. Automatic Compliance Schedule Upon Failure of Test

If a routine chronic WET test is failed, the following automatic compliance schedule shall apply. As part of this, the permittee shall either:

- i. Proceed to conduct the PTI/TIE investigation as described in Part I.A.3.d., or
- ii. Conduct accelerated testing using the single species found to be more sensitive.

If accelerated testing is being performed, the permittee shall provide written notification of the results within 14 calendar days of completion of the Pattern of Toxicity/No Toxicity demonstration. Testing will be at least once every two weeks for up to five tests until; 1) two consecutive tests fail or three of five tests fail, in which case a pattern of toxicity has been demonstrated or 2) two consecutive tests pass or three of five tests pass, in which case no pattern of toxicity has been found. If no pattern of toxicity is found the toxicity episode is considered to be ended and routine testing is to resume. If a pattern of toxicity is found, a PTI/TIE investigation is to be performed. If a pattern of toxicity is not demonstrated but a significant level of erratic toxicity is found, the Division may require an increased frequency of routine monitoring or some other modified approach.

d. PTI/TIE

The results of the PTI/TIE investigation are to be received by the Division within 120 days of the demonstration of chronic WET in the routine test, as defined above, or if accelerated testing is performed, the date the pattern of toxicity is demonstrated. A status report is to be provided to the Division at the 30, 60 and 90 day points of the PTI/TIE investigation. The Division may extend the time frame for investigation where reasonable justification exists. A request for an extension must be made in writing and received prior to the 120 day deadline. Such request must include a justification and supporting data for such an extension.

The permittee may use the time for investigation to conduct a PTI or move directly into the TIE. A PTI consists of a brief search for possible sources of WET, which might reveal causes of such toxicity and appropriate corrective actions more simply and cost effectively than a formal TIE. If the PTI allows resolution of the WET incident, the TIE need not necessarily be conducted. If, however, WET is not identified or resolved during the PTI, the TIE must be conducted within the allowed 120 day time frame.

Any permittee that is required to conduct a PTI/TIE investigation shall do so in conformance with procedures identified in the following documents, or as subsequently updated: 1) Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I, EPA/600/6-91/005F May 92, 2) Methods for Aquatic Toxicity Identification Evaluations, Phase I Toxicity Characterization Procedures, EPA/600/6-91/003 Feb. 91 and 3) Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures, EPA/600/3-88/035 Feb. 1989.

A fourth document in this series is Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures, EPA/600/3-88/036 Feb. 1989. As indicated by the title, this procedure is intended to confirm that the suspected toxicant is truly the toxicant. This investigation is optional.

Within 90 days of the determination of the toxicant or no later than 210 days after demonstration of toxicity, whichever is sooner, a control program is to be developed and received by the Division. The program shall set down a method and procedure for elimination of the toxicity to acceptable levels.

e. Request For Relief

The permittee may request relief from further investigation and testing where the toxicant has not been determined and suitable treatment does not appear possible. In requesting such relief, the permittee shall submit material sufficient to establish the following:

- i. It has complied with terms and conditions of the permit compliance schedule for the PTI/TIE investigation and other appropriate conditions as may have been required by the WQCD;
- ii. During the period of the toxicity incident it has been in compliance with all other permit conditions, including, in the case of a POTW, pretreatment requirements;
- iii. During the period of the toxicity incident it has properly maintained and operated all facilities and systems of treatment and control; and
- iv. Despite the circumstances described in paragraphs (i) and (iii) above, the source and/or cause of toxicity could not be located or resolved.

If deemed appropriate by the Division, the permit or the compliance schedule may be modified to revise the ongoing monitoring and toxicity investigation requirements to avoid an unproductive expenditure of the permittee's resources, provided that the underlying obligation to eliminate any continuing exceedance of the toxicity limit shall remain.

f. Spontaneous Disappearance

If toxicity spontaneously disappears at any time after a test failure, the permittee shall notify the Division in writing within 14 days of a demonstration of disappearance of the toxicity. The Division may require the permittee to develop

and submit additional information, which may include, but is not limited to, the results of additional testing. If no pattern of toxicity is identified or recurring toxicity is not identified, the toxicity incident response is considered closed and normal WET testing shall resume.

g. Toxicity Reopener

This permit may be reopened and modified (following proper administrative procedures) to include new compliance dates, additional or modified numerical permit limitations, a new or different compliance schedule, a change in the whole effluent toxicity testing protocol, or any other conditions related to the control of toxicants if one or more of the following events occur:

- i. Toxicity has been demonstrated in the effluent and the permit does not contain a toxicity limitation.
- ii. The PTI/TIE results indicate that the identified toxicant(s) represent pollutant(s) that may be controlled with specific numerical limits and the permit issuing authority agrees that the control of such toxicants through numerical limits is the most appropriate course of action.
- iii. The PTI/TIE reveals other unique conditions or characteristics, which, in the opinion of the permit issuing authority, justify the incorporation of unanticipated special conditions in the permit.

4. Storm Exemption - Facilities Permitted to Discharge

If, as a result of precipitation or snowmelt; a source with an allowable discharge under 40 CFR part 440 has an overflow or excess discharge of effluent which does not meet the limitations of 40 CFR part 440, the source may qualify for an exemption from such limitations with respect to such discharge if the following conditions are met:

- a) The facility is designed, constructed and maintained to contain the maximum volume of wastewater which would be generated by the facility during a 24-hour period without an increase in volume from precipitation and the maximum volume of wastewater resulting from a 10-year, 24-hour precipitation event or treat the maximum flow associated with these volumes. In computing the maximum volume of wastewater which would result from a 10-year, 24-hour precipitation event, the facility must include the volume which would result from all areas contributing runoff to the individual treatment facility, i.e., all runoff that is not diverted from the active mining area and runoff which is not diverted from the mill area.
- b) The facility takes all reasonable steps to maintain treatment of the wastewater and minimize the amount of overflow.
- c) The facility complies with the notification requirements of 40 CFR 122.60 (g) and (h). The storm exemption is designed to provide an affirmative defense to an enforcement action. Therefore, the operator has the burden of demonstrating to the appropriate authority that the above conditions have been met.

In addition, if a discharge occurs as a result of the 10-year, 24-hour storm volume being exceeded and the permittee wishes to claim an exemption from technology based effluent limitations, the permittee shall submit, within 5 days of the said discharge, documentation that the facility was maintained to contain or treat the previously specified volumes. The permittee must also submit documentation of the storm event, including the precipitation recorded at the closest official precipitation gauge station (or the permittee's own gauge), the volume of runoff produced and the steps taken to maintain treatment and minimize the amount of overflow. For claiming a storm water exemption, the permittee must also adequately demonstrate that all reasonable management, containment, and treatment options have been optimally utilized.

The storm event exemptions are only applicable for the following parameters at this facility, which are based upon Federal BAT/BPT limitations:

Total Suspended Solids
Chemical Oxygen Demand
Total Recoverable Zinc
Dissolved Radium 226
30-day average limitation for Total Radium 226.

All data/documentation required by the section which can not be reported on applicable discharge monitoring report forms (DMRs) shall be reported in a letter as an attachment to the DMR. Submittal of documentation of containment, maintenance and precipitation records above does not exempt the permittee from the notification requirements of Part II.A.4. of this permit.

B. MONITORING REQUIREMENTS

1. Frequency and Sample Type

In order to obtain an indication of the probable compliance or noncompliance with the effluent limitations specified in Part I.A.1, the permittee shall monitor all effluent parameters at the following frequencies. Such monitoring will begin immediately and last for the life of the permit unless otherwise noted. The results of such monitoring shall be reported on the Discharge Monitoring Report form (See Part I.E.)

Outfall 001A

<u>Effluent Parameter</u>	<u>Frequency</u>	<u>Sample Type</u>
Flow, MGD	Continuous	Recorder
Chemical Oxygen Demand, mg/l	Weekly	Composite
Total Suspended Solids (TSS), mg/l	Weekly	Composite
pH, s.u. (minimum-maximum)	Weekly	Grab
Oil and Grease, mg/l	Weekly	Visual
Total Dissolved Solids, mg/l	Quarterly	Grab
Whole Effluent Toxicity, Chronic Lethality	Quarterly	3 Composites/Test
Total Arsenic, µg/l	Weekly	Composite i/
Total Recoverable Cadmium, µg/l	Weekly	Composite i/
Total Recoverable Manganese, µg/l	Weekly	Composite
Total Recoverable Selenium, µg/l	Weekly	Composite i/
Total Recoverable Zinc, µg/l	Weekly	Composite i/
Total Uranium, ug/l	Weekly	Composite
Dissolved Radium 226, pCi/l	Weekly	Composite
Total Radium 226 +228, pCi/l	Weekly	Composite

Outfall MON1

<u>Effluent Parameter</u>	<u>Frequency</u>	<u>Sample Type</u>
Boron, mg/l	Monthly	Composite
Total Recoverable Beryllium, ug/l	Monthly	Composite
Total Recoverable Trivalent Chromium, ug/l	Monthly	Composite
Total Recoverable Lead, ug/l	Monthly	Composite
Total Recoverable Nickel, ug/l	Monthly	Composite
Total Recoverable Vanadium, ug/l	Monthly	Composite
Weak Acid Dissociable Cyanide, mg/l	Monthly	Composite

Self-monitoring sampling by the permittee for compliance with the monitoring requirements specified above shall be performed at the following location(s): Outfalls 001A and MON1, following treatment and prior to entering the middle fork of Lumsden Creek.

If the permittee, using the approved analytical methods, monitors any parameter more frequently than required by this permit, then the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form (DMRs) or other forms as required by the Division. Such increased frequency shall also be indicated.

i/ This parameter is subject to "Noncompliance Notification" requirements of Part II.A.4.b.(4) of this permit for violations of the Daily Maximum limitation for this parameter.

a. Oil and Grease Monitoring

For every outfall with oil and grease monitoring, in the event an oil sheen or floating oil is observed, a grab sample shall be collected, analyzed, and reported on the appropriate DMR. In addition, corrective action shall be taken immediately to mitigate the discharge of oil and grease. A description of the corrective action taken should be included with the DMR.

2. Salinity Parameters

In order to obtain an indication of the quantity of Salinity, measured as total dissolved solids (TDS), being discharged from the site the permittee shall monitor the wastewater effluent at the following frequencies:

<u>Outfall</u>	<u>Frequency</u>	<u>Sample Type</u>
001A	Quarterly	Grab

Self-monitoring samples taken in compliance with the monitoring requirements specified above shall be taken at those locations listed in Part I.B.1. TDS shall be sampled on a monthly basis until six samples have been analyzed. A report of "No Discharge" shall not be counted as one of the six samples. Thereafter, monitoring shall continue on a quarterly basis. Following submittal of the initial six sets of monthly data, the Division shall determine whether the permittee is required to submit a report addressing salt removal in accordance with the Colorado River Salinity Standards, Regulation No. (5CCR 1002-39). If the salinity report is required, the Division shall so advise the permittee by letter or through the inclusion of a compliance schedule and the report shall be submitted within 180 days.

Where, based on a minimum of 5 samples, the permittee demonstrates to the satisfaction of the Division that the level of total dissolved solids (TDS) in the effluent can be calculated based upon the level of electrical conductivity, the permittee may measure and report TDS in terms of electrical conductivity.

C. DEFINITIONS OF TERMS

1. "Composite" sample is a minimum of four (4) grab samples collected at equally spaced two (2) hour intervals and proportioned according to flow.
2. "Continuous" measurement, is a measurement obtained from an automatic recording device which continually measures provides measurements.
3. "Daily Maximum limitation" means the limitation for this parameter shall be applied as an instantaneous maximum (or, for pH or DO, instantaneous minimum) value. The instantaneous value is defined as the analytical result of any individual sample. DMRs shall include the maximum (and/or minimum) of all instantaneous values within the calendar month. Any instantaneous value beyond the noted daily maximum limitation for the indicated parameter shall be considered a violation of this permit.
4. "Dissolved (D) metals fraction" is defined in the Basic Standards and Methodologies for Surface Water 1002-31, as that portion of a water and suspended sediment sample which passed through a 0.40 or 0.45 UM (micron) membrane filter. Determinations of "dissolved" constituents are made using the filtrate. This may include some very small (colloidal) suspended particles which passed through the membrane filter as well as the amount of substance present in true chemical solution.

5. "Grab" sample, is a single "dip and take" sample so as to be representative of the parameter being monitored.
6. "In-situ" measurement is defined as a single reading, observation or measurement taken in the field at the point of discharge.
7. "Instantaneous" measurement is a single reading, observation, or measurement performed on site using existing monitoring facilities.
8. "Potentially dissolved (PD) metals fraction" is defined in the Basic Standards and Methodologies for Surface Water 1002-31, as that portion of a constituent measured from the filtrate of a water and suspended sediment sample that was first treated with nitric acid to a pH of 2 or less and let stand for 8 to 96 hours prior to sample filtration using a 0.40 or 0.45-UM (micron) membrane filter. Note the "potentially dissolved" method cannot be used where nitric acid will interfere with the analytical procedure used for the constituent measured.
9. "Quarterly measurement frequency" means samples may be collected at any time during the calendar quarter if a continual discharge occurs. If the discharge is intermittent, then samples shall be collected during the period that discharge occurs.
10. "Recorder" requires the continuous operation of a chart and/or totalizer (or drinking water rotor meters or pump hour meters where previously approved.)
11. "Seven (7) day average" means, the arithmetic mean of all samples collected in a seven (7) consecutive day period. Such seven (7) day averages shall be calculated for all calendar weeks, which are defined as beginning on Sunday and ending on Saturday. If the calendar week overlaps two months (i.e. the Sunday is in one month and the Saturday in the following month), the seven (7) day average calculated for that calendar week shall be associated with the month that contains the Saturday. Samples may not be used for more than one (1) reporting period. (Not applicable to fecal coliform or *E. coli* determinations.)
12. "Thirty (30) day average" means, except for fecal coliform or *E. coli* bacteria, the arithmetic mean of all samples collected during a thirty (30) consecutive-day period. For fecal coliform or *E. coli* bacteria, it is the geometric mean of all samples collected in a thirty (30) day period. The permittee shall report the appropriate mean of all self-monitoring sample data collected during the calendar month on the Discharge Monitoring Reports. Samples shall not be used for more than one (1) reporting period.
13. "Total Metals" means the concentration of metals determined on an unfiltered sample following vigorous digestion (Section 4.1.3), or the sum of the concentrations of metals in both the dissolved and suspended fractions, as described in Manual of Methods for Chemical Analysis of Water and Wastes, U.S. Environmental Protection Agency, March 1979, or its equivalent.
14. "Total Recoverable Metals" means that portion of a water and suspended sediment sample measured by the total recoverable analytical procedure described in Methods for Chemical Analysis of Water and Wastes, U.S. Environmental Protection Agency, March 1979 or its equivalent.
15. "Visual" observation is observing the discharge to check for the presence of a visible sheen or floating oil.
16. "Water Quality Control Division" or "Division" means the state Water Quality Control Division as established in 25-8-101 et al.)

Additional relevant definitions are found in the Colorado Water Quality Control Act, CRS §§ 25-8-101 et seq., the Colorado Discharge Permit System Regulations, Regulation 61 (5 CCR 1002-61) and other applicable regulations.

D. SPECIAL REQUIREMENTS

1. Materials Containment Plan

Pursuant to Sections 61.8(3)(g) and (r) of the Colorado Discharge Permit System Regulations, the permittee is required to submit a Materials Containment Plan. Such a plan shall be submitted to the Division within ninety (90) days after the effective date of this permit and must be implemented. The plan shall include information and procedures for the prevention and containment of spills of materials used, processed or stored at the facility which if spilled would have a reasonable probability of having a visible or otherwise detrimental impact on waters of the State 1/ 2/. The plan shall include, but not necessarily be limited to:

- a. An updated history of the spills which have occurred in the three (3) years preceding the effective date of this permit. The history shall include a discussion on the cause of the spills and a the preventative measures designed to eliminate them from reoccurring;
- b. An update of the reporting system which will be used to notify, at a minimum, responsible facility management, the Division, the Environmental Protection Agency, downstream water users within 5 miles downstream of the facility, and local health officials;
- c. A description of any changes in the preventative facilities (including overall facility plot) which prevent, contain, or treat spills and unplanned discharges;
- d. A current list which includes the volumes or quantities of all materials used, processed, or stored at the facility which represent a potential spill threat to surface waters. The location of stored material shall be indicated on the facility plot submitted for item c;
- e. An implementation schedule for additional facilities which might be required in item c, but which are not yet operational;
- f. A current list of available outside contractors, agencies, or other sources which could be utilized in the event of a spill in order to clean up its effects. If the facility is capable of handling spills in-house, this shall be documented in the plan;
- g. Provision for yearly review and updating of the contingency plan, plus resubmission of the plan to the Division if conditions and/or procedures at the facility change the original plan.

The foregoing provisions shall in no way render inapplicable those requirements imposed by Federal Water Pollution Control Act, 33 U.S.C. § 1321, regulations promulgated thereunder, the Colorado Water Quality Control Act, and regulations promulgated thereunder. It is recommended that this plan be prepared by a professional engineer registered in the State of Colorado.

Nothing herein contained shall be construed as allowing any discharge to waters of the State other than through the discharge points specifically authorized in this permit. Nothing herein contained shall be construed as excusing any liability the permittee might have, civil or criminal, for any spill.

The submittal of a Spill Prevention Control and Countermeasure Plan (SPCC Plan) as required by 40 CFR Part 112 may satisfy all or part of this requirement. Should additional materials exist on site which are not addressed in the SPCC Plan, addressing those materials as per the above is required.

- 1/ If there is no such material present at the site, this shall be indicated in writing and submitted to the Division for review.
- 2/ If there is material present but the permittee feels there is not a reasonable probability of a spill impacting waters of the State, this shall be documented in writing and submitted to the Division for review. This documentation shall include; 1) distance to nearest surface waters, and; 2) a detailed description of any structure which prohibits the release of material onto the ground or into a conveyance system.

E. GENERAL MONITORING, SAMPLING AND REPORTING REQUIREMENTS

Routine Reporting of Data

Reporting of the data gathered in compliance with Part I.B.1 shall be on a **monthly** basis. Reporting of all data gathered shall comply with the requirements of Part I.E. (General Requirements). Monitoring results shall be summarized for each calendar month and reported on Division approved discharge monitoring report (DMR) forms (EPA form 3320-1). One form shall be mailed to the Water Quality Control Division, as indicated below, so that the DMR is received no later than the 28th day of the following month (for example, the DMR for the first calendar quarter must be received by the Division by April 28th). If no discharge occurs during the reporting period, "No Discharge" shall be reported.

The DMR forms consist of four pages - the top "original" copy, and three attached no-carbon-required copies. After the DMR form has been filled out and signed, the four copies must be separated and distributed as follows:

The first original signed copy of each discharge monitoring report (DMR) shall be submitted to the Division at the following address:

Colorado Department of Public Health and Environment
Water Quality Control Division
WQCD-P-B2
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

Additional copies are for the permittee records. The Discharge Monitoring Report forms shall be filled out accurately and completely in accordance with requirements of this permit and the instructions on the forms. They shall be signed by an authorized person as identified in Part I.E.6.

Calculations for all limitations which require the averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Division in the permit

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified, before the effluent joins or is diluted by any other wastestream, body of water, or substance. Monitoring points shall not be changed without notification to and approval by the Division.

If the permittee monitors at the point of discharge any pollutant limited by the permit more frequently than required by the permit, using approved test procedures or as specified in the permit, the result of this monitoring shall be included in the calculation and reporting of data to the Division.

Analytical and Sampling Methods for Monitoring

The permittee shall install, calibrate, use and maintain monitoring methods and equipment, including biological and indicated pollutant monitoring methods. All sampling shall be performed by the permittee according to specified methods in 40 C.F.R. Part 136; methods approved by EPA pursuant to 40 C.F.R. Part 136; or methods approved by the Division, in the absence of a method specified in or approved pursuant to 40 C.F.R. part 136. The analytical method selected for a parameter shall be the one that can measure the lowest detected limit for that parameter unless the permit limitation or stream standard for those parameters not limited, is within the testing range of another approved method. When requested in writing, the Division may approve an alternative analytical procedure or any significant modification to an approved procedure.

When the most sensitive analytical method which complies with this part, has a detection limit greater than or equal to the permit limit, the permittee shall report "less than (the detectable limit)," as appropriate. Such reports shall not be considered as violations of the permit limit. The present lowest method detection limits for specific parameters (which have limitations that are, in some cases, less than or equal to the detection limit) are as follows:

<u>Effluent Characteristic</u>	<u>Method Detection Limits, µg/l</u>
Arsenic	10
Cadmium	0.5
Chromium	10
Copper	5
Iron	100
Lead	5
Manganese	600
Mercury	0.003
Nickel	20
Selenium	10
Zinc	10

These limits apply to the total recoverable or the potentially dissolved fraction of metals.

Records

The permittee shall establish and maintain records. Those records shall include the following:

- a. The date, type, exact location, and time of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) the analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques or methods used;
- f. The results of such analyses; and
- g. Any other observations which may result in an impact on the quality or quantity of the discharge as indicated in 40 CFR 122.44 (i)(1)(iii).

The permittee shall retain for a minimum of three (3) years records of all monitoring information, including all original strip chart recordings for continuous monitoring instrumentation, all calibration and maintenance records, copies of all reports required by this permit and records of all data used to complete the application for this permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the permittee or when requested by the Division or BPA.

Flow Measuring Device

If not already a part of the permitted facility, within ninety (90) days after the effective date of the permit, a flow measuring device shall be installed to give representative values of effluent quantities at the respective discharge points. Unless specifically exempted, or modified in Part I.E.5 of this permit, a flow measuring device will be applicable at all designated discharge points.

At the request of the Division, the permittee shall show proof of the accuracy of any flow-measuring device used in obtaining data submitted in the monitoring report. The flow-measuring device must indicate values within ten (10) percent of the actual flow being discharged from the facility.

Signatory and Certification Requirements

- a. All reports and other information required by the Division, shall be signed and certified for accuracy by the permittee in accord with the following criteria:
 - i) In the case of corporations, by a principal executive officer of at least the level of vice-president or his or her duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge described in the form originates;

- ii) In the case of a partnership, by a general partner;
 - iii) In the case of a sole proprietorship, by the proprietor;
 - iv) In the case of a municipal, state, or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.
- b. All reports required by permits, and other information requested by the Division shall be signed by a person as described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
- i) The authorization is made in writing by a person described above;
 - ii) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and,
 - iii) The written authorization is submitted to the Division.

If an authorization as described in this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of this section must be submitted to the Division prior to or together with any reports, information, or applications to be signed by an authorized representative.

The permittee, or the duly authorized representative shall make and sign the following certification on all such documents:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

PART II

A. NOTIFICATION REQUIREMENTS

1. Notification to Parties

All notification requirements under this section shall be directed as follows:

- a. Oral Notifications, other than for spills, during normal business hours shall be to:

Water Quality Protection Section - Industrial Compliance Program
Water Quality Control Division
Telephone: (303) 692-3500

Spills notifications at any time and other notifications after hours shall be to:

Emergency Management Program
Laboratory and Radiation Services Division
Telephone: (877) 518-5608

- b. Written notification shall be to:

Water Quality Protection Section - Industrial Compliance Program
Water Quality Control Division
Colorado Department of Public Health and Environment
WQCD-WQP-B2
4300 Cherry Creek Drive South
Denver, CO 80246-1530

2. Change in Discharge

The permittee shall notify the Division, in writing, of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- a. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged, or;
- b. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported pursuant to an approved land application plan.

The permittee shall give advance notice to the Division of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

Whenever notification of any planned physical alterations or additions to the permitted facility is required pursuant to this section,, the permittee shall furnish the Division such plans and specifications which the Division deems reasonably necessary to evaluate the effect on the discharge, the stream, or ground water. If the Division finds that such new or altered discharge might be inconsistent with the conditions of the permit, the Division shall require a new or revised permit application and shall follow the procedures specified in Sections 61.5 through 61.6, and 61.15 of the Colorado Discharge Permit System Regulations.

3. Special Notifications - Definitions

- a. Bypass: The intentional diversion of waste streams from any portion of a treatment facility.

- b. Severe Property Damage: Substantial physical damage to property at the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. It does not mean economic loss caused by delays in production.
- c. Spill: An incident in which flows or solid materials are accidentally or unintentionally allowed to flow or escape so as to be lost from the treatment, processing or manufacturing system which may cause or threaten pollution of state waters.
- d. Upset: An exceptional incident in which there is unintentional and temporary noncompliance with permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

4. Noncompliance Notification

- a. If, for any reason, the permittee does not comply with or will be unable to comply with any discharge limitations or standards specified in this permit, the permittee shall, at a minimum, provide the Division and EPA with the following information:
 - i) A description of the discharge and cause of noncompliance;
 - ii) The period of noncompliance, including exact dates and times and/or the anticipated time when the discharge will return to compliance; and
 - iii) Steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.
- b. The permittee shall report the following circumstances orally within twenty-four (24) hours from the time the permittee becomes aware of the circumstances, and shall mail to the Division a written report containing the information requested in Part II.A.4 (a) within five (5) days after becoming aware of the following circumstances:
 - i) Circumstances leading to any noncompliance which may endanger health or the environment regardless of the cause of the incident;
 - ii) Circumstances leading to any unanticipated bypass which exceeds any effluent limitations in the permit;
 - iii) Circumstances leading to any upset or spill which causes an exceedance of any effluent limitation in the permit;
 - iv) Daily maximum violations for any of the pollutants limited by Part I.A of this permit and specified as requiring 24-hour notification. This includes any toxic pollutant or hazardous substance or any pollutant specifically identified as the method to control any toxic pollutant or hazardous substance.
- c. The permittee shall report instances of non-compliance which are not required to be reported within 24-hours at the time Discharge Monitoring Reports are submitted. The reports shall contain the information listed in sub-paragraph (a) of this section.

5. Other Notification Requirements

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule in the permit shall be submitted no later than fourteen (14) days following each scheduled date, unless otherwise provided by the Division.

The permittee shall notify the Division, in writing, thirty (30) days in advance of a proposed transfer of permit as provided in Part II.B.3.

The permittee's notification of all anticipated noncompliance does not stay any permit condition.

All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Division as soon as they know or have reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - i) One hundred micrograms per liter (100 $\mu\text{g/l}$);
 - ii) Two hundred micrograms per liter (200 $\mu\text{g/l}$) for acrolein and acrylonitrile; five hundred micrograms per liter (500 $\mu\text{g/l}$) for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and one milligram per liter (1.0 mg/l) for antimony;
 - iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with Section 61.4(2)(g).
 - iv) The level established by the Division in accordance with 40 C.F.R. § 122.44(f).
- b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - i) Five hundred micrograms per liter (500 $\mu\text{g/l}$);
 - ii) One milligram per liter (1 mg/l) for antimony; and
 - iii) Ten (10) times the maximum concentration value reported for that pollutant in the permit application.
 - iv) The level established by the Division in accordance with 40 C.F.R. § 122.44(f).

6. Bypass Notification

If the permittee knows in advance of the need for a bypass, a notice shall be submitted, at least ten days before the date of the bypass, to the Division. The bypass shall be subject to Division approval and limitations imposed by the Division. Violations of requirements imposed by the Division will constitute a violation of this permit.

7. Upsets

a. Effect of an Upset

An upset constitutes an affirmative defense to an action brought for noncompliance with permit effluent limitations if the requirements of paragraph (b) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

b. Conditions Necessary for a Demonstration of Upset

A permittee who wishes to establish the affirmative defense of upset shall demonstrate through properly signed contemporaneous operating logs, or other relevant evidence that:

- i) An upset occurred and that the permittee can identify the specific cause(s) of the upset; and
- ii) The permitted facility was at the time being properly operated and maintained; and
- iii) The permittee submitted proper notice of the upset as required in Part II.A.4. of this permit (24-hour notice); and

- iv) The permittee complied with any remedial measure necessary to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

In addition to the demonstration required above, a permittee who wishes to establish the affirmative defense of upset for a violation of effluent limitations based upon water quality standards shall also demonstrate through monitoring, modeling or other methods that the relevant standards were achieved in the receiving water.

c. Burden of Proof

In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

8. **Discharge Point**

Any discharge to the waters of the State from a point source other than specifically authorized by this permit is prohibited.

9. **Proper Operation and Maintenance**

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee as necessary to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when necessary to achieve compliance with the conditions of the permit.

10. **Minimization of Adverse Impact**

The permittee shall take all reasonable steps to minimize or prevent any discharge of sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. As necessary, accelerated or additional monitoring to determine the nature and impact of the noncomplying discharge is required.

11. **Removed Substances**

Solids, sludges, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed in accordance with applicable state and federal regulations.

For all domestic wastewater treatment works, at industrial facilities, the permittee shall dispose of sludge in accordance with all State and Federal regulations.

12. **Submission of Incorrect or Incomplete Information**

Where the permittee failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or report to the Division, the permittee shall promptly submit the relevant information which was not submitted or any additional information needed to correct any erroneous information previously submitted.

13. **Bypass**

- a. Bypasses are prohibited and the Division may take enforcement action against the permittee for bypass, unless:
 - i) The bypass is unavoidable to prevent loss of life, personal injury, or severe property damage;
 - ii) There were no feasible alternatives to bypass such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

iii) Proper notices were submitted in compliance with Part II.A.4.

- b. "Severe property damage" as used in this Subsection means substantial physical damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- c. The permittee may allow a bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance or to assure optimal operation. These bypasses are not subject to the provisions of paragraph (a) above.
- d. The Division may approve an anticipated bypass, after considering adverse effects, if the Division determines that the bypass will meet the conditions specified in paragraph (a) above.

14. Reduction, Loss, or Failure of Treatment Facility

The permittee has the duty to halt or reduce any activity if necessary to maintain compliance with the effluent limitations of the permit. Upon reduction, loss, or failure of the treatment facility, the permittee shall, to the extent necessary to maintain compliance with its permit, control production, control sources of wastewater, or all discharges, until the facility is restored or an alternative method of treatment is provided. This provision also applies to power failures, unless an alternative power source sufficient to operate the wastewater control facilities is provided.

It shall not be a defense for a permittee in an enforcement action that it would be necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B. RESPONSIBILITIES

Inspections and Right to Entry

The permittee shall allow the Division and/or the authorized representative, upon the presentation of credentials:

- a. To enter upon the permittee's premises where a regulated facility or activity is located or in which any records are required to be kept under the terms and conditions of this permit;
- b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit and to inspect any monitoring equipment or monitoring method required in the permit; and
- c. To enter upon the permittee's premises in a reasonable manner and at a reasonable time to inspect and/or investigate, any actual, suspected, or potential source of water pollution, or to ascertain compliance or non compliance with the Colorado Water Quality Control Act or any other applicable state or federal statute or regulation or any order promulgated by the Division. The investigation may include, but is not limited to, the following: sampling of any discharge and/or process waters, the taking of photographs, interviewing of any person having knowledge related to the discharge permit or alleged violation, access to any and all facilities or areas within the permittee's premises that may have any affect on the discharge, permit, or alleged violation. Such entry is also authorized for the purpose of inspecting and copying records required to be kept concerning any effluent source.
- d. The permittee shall provide access to the Division to sample the discharge at a point after the final treatment process but prior to the discharge mixing with state waters upon presentation of proper credentials.

In the making of such inspections, investigations, and determinations, the Division, insofar as practicable, may designate as its authorized representatives any qualified personnel of the Department of Agriculture. The Division may also request assistance from any other state or local agency or institution.

Duty to Provide Information

The permittee shall furnish to the Division, within a reasonable time, any information which the Division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Division, upon request, copies of records required to be kept by this permit.

Transfer of Ownership or Control

- a. Except as provided in paragraph b. of this section, a permit may be transferred by a permittee only if the permit has been modified or revoked and reissued as provided in Section 61.8(8) of the Colorado Discharge Permit System Regulations, to identify the new permittee and to incorporate such other requirements as may be necessary under the Federal Act.
- b. A permit may be automatically transferred to a new permittee if:
 - i) The current permittee notifies the Division in writing 30 days in advance of the proposed transfer date; and
 - ii) The notice includes a written agreement between the existing and new permittee(s) containing a specific date for transfer of permit responsibility, coverage and liability between them; and
 - iii) The Division does not notify the existing permittee and the proposed new permittee of its intent to modify, or revoke and reissue the permit.
 - iv) Fee requirements of the Colorado Discharge Permit System Regulations, Section 61.15, have been met.

Availability of Reports

Except for data determined to be confidential under Section 308 of the Federal Clean Water Act and the Colorado Discharge Permit System Regulations 5 CCR 1002-61; Section 61.5(4), all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Division and the Environmental Protection Agency.

The name and address of the permit applicant(s) and permittee(s), permit applications, permits and effluent data shall not be considered confidential. Knowingly making false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the Federal Clean Water Act, and Section 25-8-610 C.R.S.

Modification, Suspension, Revocation, or Termination of Permits By the Division

The filing of a request by the permittee for a permit modification, revocation and reissuance, termination or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

- a. A permit may be modified, suspended, or terminated in whole or in part during its term for reasons determined by the Division including, but not limited to, the following:
 - i) Violation of any terms or conditions of the permit;
 - ii) Obtaining a permit by misrepresentation or failing to disclose any fact which is material to the granting or denial of a permit or to the establishment of terms or conditions of the permit; or
 - iii) Materially false or inaccurate statements or information in the permit application or the permit.
 - iv) A determination that the permitted activity endangers human health or the classified or existing uses of state waters and can only be regulated to acceptable levels by permit modifications or termination.

- b. A permit may be modified in whole or in part for the following causes, provided that such modification complies with the provisions of Section 61.10 of the Colorado Discharge Permit System Regulations:
- i) There are material and substantial alterations or additions to the permitted facility or activity which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit.
 - ii) The Division has received new information which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of different permit conditions at the time of issuance. For permits issued to new sources or new dischargers, this cause includes information derived from effluent testing required under Section 61.4(7)(e) of the Colorado Discharge Permit System Regulations. This provision allows a modification of the permit to include conditions that are less stringent than the existing permit only to the extent allowed under Section 61.10 of the Colorado Discharge Permit System Regulations.
 - iii) The standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued. Permits may be modified during their terms for this cause only as follows:
 - (A) The permit condition requested to be modified was based on a promulgated effluent limitation guideline, EPA approved water quality standard, or an effluent limitation set forth in 5 CCR 1002-62, § 62 et seq.; and
 - (B) EPA has revised, withdrawn, or modified that portion of the regulation or effluent limitation guideline on which the permit condition was based, or has approved a Commission action with respect to the water quality standard or effluent limitation on which the permit condition was based; and
 - (C) The permittee requests modification after the notice of final action by which the EPA effluent limitation guideline, water quality standard, or effluent limitation is revised, withdrawn, or modified; or
 - (D) For judicial decisions, a court of competent jurisdiction has remanded and stayed EPA promulgated regulations or effluent limitation guidelines, if the remand and stay concern that portion of the regulations or guidelines on which the permit condition was based and a request is filed by the permittee in accordance with this Regulation, within ninety (90) days of judicial remand.
 - iv) The Division determines that good cause exists to modify a permit condition because of events over which the permittee has no control and for which there is no reasonable available remedy.
 - v) The permittee has received a variance.
 - vi) When required to incorporate applicable toxic effluent limitation or standards adopted pursuant to § 307(a) of the Federal act.
 - vii) When required by the reopener conditions in the permit.
 - viii) As necessary under 40 C.F.R. 403.8(e), to include a compliance schedule for the development of a pretreatment program.
 - ix) When the level of discharge of any pollutant which is not limited in the permit exceeds the level which can be achieved by the technology-based treatment requirements appropriate to the permittee under Section 61.8(2) of the Colorado Discharge Permit System Regulations.
 - x) To establish a pollutant notification level required in Section 61.8(5) of the Colorado Discharge Permit System Regulations.

- xi) To correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions, to the extent allowed in Section 61.10 of the Colorado State Discharge Permit System Regulations.
 - xii) When required by a permit condition to incorporate a land application plan for beneficial reuse of sewage sludge, to revise an existing land application plan, or to add a land application plan.
 - xiii) For any other cause provided in Section 61.10 of the Colorado Discharge Permit System Regulations.
- c. At the request of a permittee, the Division may modify or terminate a permit and issue a new permit if the following conditions are met:
- i) The Regional Administrator has been notified of the proposed modification or termination and does not object in writing within thirty (30) days of receipt of notification,
 - ii) The Division finds that the permittee has shown reasonable grounds consistent with the Federal and State statutes and regulations for such modifications or termination;
 - iii) Requirements of Section 61.15 of the Colorado Discharge Permit System Regulations have been met, and
 - iv) Requirements of public notice have been met.
- d. Permit modification (except for minor modifications), termination or revocation and reissuance actions shall be subject to the requirements of Sections 61.5(2), 61.5(3), 61.6, 61.7 and 61.15 of the Colorado Discharge Permit System Regulations. The Division shall act on a permit modification request, other than minor modification requests, within 180 days of receipt thereof. Except for minor modifications, the terms of the existing permit govern and are enforceable until the newly issued permit is formally modified or revoked and reissued following public notice.
- e. Upon consent by the permittee, the Division may make minor permit modifications without following the requirements of Sections 61.5(2), 61.5(3), 61.7, and 61.15 of the Colorado Discharge Permit System Regulations. Minor modifications to permits are limited to:
- i) Correcting typographical errors; or
 - ii) Increasing the frequency of monitoring or reporting by the permittee; or
 - iii) Changing an interim date in a schedule of compliance, provided the new date of compliance is not more than 120 days after the date specific in the existing permit and does not interfere with attainment of the final compliance date requirement; or
 - iv) Allowing for a transfer in ownership or operational control of a facility where the Division determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittees has been submitted to the Division; or
 - v) Changing the construction schedule for a discharger which is a new source, but no such change shall affect a discharger's obligation to have all pollution control equipment installed and in operation prior to discharge; or
 - vi) Deleting a point source outfall when the discharge from that outfall is terminated and does not result in discharge of pollutants from other outfalls except in accordance with permit limits.
- f. When a permit is modified, only the conditions subject to modification are reopened. If a permit is revoked and reissued, the entire permit is reopened and subject to revision and the permit is reissued for a new term.
- g. The filing of a request by the permittee for a permit modification, revocation and reissuance or termination does not stay any permit condition.

- h. All permit modifications and reissuances are subject to the antibacksliding provisions set forth in 61.10(e) through (g).

Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under Section 311 (Oil and Hazardous Substance Liability) of the Clean Water Act.

State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority granted by Section 510 of the Clean Water Act.

Permit Violations

Failure to comply with any terms and/or conditions of this permit shall be a violation of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit.

Property Rights

The issuance of this permit does not convey any property or water rights in either real or personal property, or stream flows, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

Severability

The provisions of this permit are severable. If any provisions of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances and the application of the remainder of this permit shall not be affected.

Renewal Application

If the permittee desires to continue to discharge, a permit renewal application shall be submitted at least one hundred eighty (180) days before this permit expires. If the permittee anticipates there will be no discharge after the expiration date of this permit, the Division should be promptly notified so that it can terminate the permit in accordance with Part II.B.5.

Confidentiality

Any information relating to any secret process, method of manufacture or production, or sales or marketing data which has been declared confidential by the permittee, and which may be acquired, ascertained, or discovered, whether in any sampling investigation, emergency investigation, or otherwise, shall not be publicly disclosed by any member, officer, or employee of the Commission or the Division, but shall be kept confidential. Any person seeking to invoke the protection of this Subsection (12) shall bear the burden of proving its applicability. This section shall never be interpreted as preventing full disclosure of effluent data.

Fees

The permittee is required to submit payment of an annual fee as set forth in the 2005 amendments to the Water Quality Control Act. Section 25-8-502 (1) (b), and the Colorado Discharge Permit System Regulations 5 CCR 1002-61, Section 61.15 as amended. Failure to submit the required fee when due and payable is a violation of the permit and will result in enforcement action pursuant to Section 25-8-601 et. seq., C.R.S. 1973 as amended.

Duration of Permit

The duration of a permit shall be for a fixed term and shall not exceed five (5) years. Filing of a timely and complete application shall cause the expired permit to continue in force to the effective date of the new permit. The permit's duration may be extended only through administrative extensions and not through interim modifications.

Section 307 Toxics

If a toxic effluent standard or prohibition, including any applicable schedule of compliance specified, is established by regulation pursuant to Section 307 of the Federal Act for a toxic pollutant which is present in the permittee's discharge and such standard or prohibition is more stringent than any limitation upon such pollutant in the discharge permit, the Division shall institute proceedings to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition.

Antibacksliding

- a. A permit may not be renewed, reissued, or modified to contain effluent limitations adopted pursuant to Section 25-8-503(1)(b) (BPJ) of the Water Quality Control Act, which are less stringent than the comparable effluent limitations or standards in the previous permit, unless any one of the following exceptions is met and the conditions of paragraph (c) of this section are met:
 - i) Material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of less stringent effluent limitations; or
 - ii) Information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation or standard at the time of permit issuance; or
 - iii) The Division determines that technical mistakes or mistaken interpretations of law were made in issuing the permit, which justified relaxation of the effluent limitations or standards; or
 - iv) A less stringent effluent limitation or standard is necessary because of events over which the permittee has no control and for which there is not reasonable available remedy; or
 - v) The permittee has received a permit variance; or
 - vi) The permittee has installed the treatment facilities required to meet the effluent limitations in the previous permit and has properly operated and maintained the facilities but has nevertheless been unable to achieve the previous effluent limitations, in which case, the limitations in the renewed, reissued, or modified permit may reflect the level of pollutant control actually achieved (but shall not be less stringent than required by effluent guidelines in effect at the time of permit renewal, reissuance, or modification).
- b. A permit may not be renewed, reissued, or modified to contain effluent limitations adopted pursuant to 61.8(2)(b) or (c) of the Colorado Discharge Permit System Regulations that are less stringent than the comparable effluent limitations in the previous permit, unless any of the exceptions provided herein is met and the conditions of paragraph c. of this section are met.
 - i) In waters where the applicable water quality standard has not yet been attained, effluent limitations based on a total maximum daily load or other waste load allocation may be revised to be less stringent if the cumulative effect of all such revisions assures attainment of such water quality standard, or the designated use which is not being attained is removed in accordance with Section 31.6 of the Basic Standards.
 - ii) In waters where the applicable water quality standard has been attained, effluent limitations based on a total maximum daily load, other waste load allocation, or any other permitting standard (including any water quality standard) may be revised to be less stringent if such revision is subject to and consistent with the antidegradation

provisions of Section 31.8 of the Basic Standards. Consistency with Section 31.8 shall be presumed if the waters in question have been designated by the Commission as "use protected"; or

iii) Whether or not the applicable water quality standard has been attained:

- (A) Material and substantial alterations or additions to the permitted facility occurred after permit issuance which justified the application of less stringent effluent limitations; or
 - (B) A less stringent effluent limitation is necessary because of events over which the permittee has no control and for which there is not reasonable available remedy; or
 - (C) The permittee has received a permit variance; or
 - (D) The permittee has installed the treatment facilities required to meet the effluent limitations in the previous permit and has properly operated and maintained the facilities but has nevertheless been unable to achieve the previous effluent limitations, in which case, the limitations in the reviewed, reissued, or modified permit may reflect the level of pollutant control actually achieved (but shall not be less stringent than required by effluent guidelines in effect at the time of permit renewal, reissuance, or modification).
- c. In no event may a permit with respect to which paragraphs (a) and (b) of this section apply be renewed, reissued, or modified to contain an effluent limitation or standard which is less stringent than required by federal effluent guidelines in effect at the time the permit is renewed, reissued, or modified. In no event may such a permit to discharge into state waters be renewed, reissued, or modified to contain a less stringent effluent limitation if the implementation of such limitation would result in a violation of an applicable water quality standard.

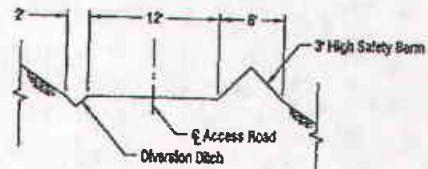
Effect of Permit Issuance

- a. The issuance of a permit does not convey any property rights or any exclusive privilege.
- b. The issuance of a permit does not authorize any injury to person or property or any invasion of personal rights, nor does it authorize the infringement of federal, state, or local laws or regulations.
- c. Except for any toxic effluent standard or prohibition imposed under Section 307 of the Federal act or any standard for sewage sludge use or disposal under Section 405(d) of the Federal act, compliance with a permit during its term constitutes compliance, for purposes of enforcement, with Sections 301, 302, 306, 318, 403, and 405(a) and (b) of the Federal act. However, a permit may be modified, revoked and reissued, or terminated during its term for cause as set forth in Section 61.8(8) of the Colorado Discharge Permit System Regulations.
- d. Compliance with a permit condition which implements a particular standard for sewage sludge use or disposal shall be an affirmative defense in any enforcement action brought for a violation of that standard for sewage sludge use or disposal.

FIGURE 1: WHIRLWIND PROJECT GENERAL LOCATION



FIGURE 2: WHIRLWIND PROJECT SITE LAYOUT



PACKRAT ACCESS ROAD CROSS SECTION
 N.T.S.

— Culvert
 - - - Diversion Ditch



Updated 3/2007

**STATE OF COLORADO
GENERAL PERMIT APPLICATION
AND STORMWATER MANAGEMENT PLAN GUIDANCE FOR
STORMWATER
DISCHARGES ASSOCIATED WITH METAL MINING (and some Coal Mining)**

Applicability: This application is for use by all industrial stormwater dischargers engaged in metal mining, and coal mining (if not covered under the coal general permit, COG-850000), as indicated in Appendix A. This form may be reproduced.

INSTRUCTIONS

A) Submitting the Application

Application Due Date: At least **thirty days** prior to the anticipated date of discharge, the owner (or operator if the owner does not operate the facility) of the facility shall submit an application as provided by the Water Quality Control Division (the "Division").

This form may be reproduced, and is also available from the Division's web site at www.cdphe.state.co.us/wq/PermitsUnit. After processing of the application, a permit certification and other relevant materials will be sent to the attention of the legally responsible person (Item 8 on the application form).

Permit Fee: Do not send any payment with this application. You will be billed once you are covered under a permit. Current permit fees can be obtained from the Division's web site at www.cdphe.state.co.us/wq/PermitsUnit.

Application Completeness: All items of the application must be completed accurately and in their entirety or the application will be deemed incomplete, and processing of the application will not begin until all information is received. (Do not include a copy of the Stormwater Management Plan, unless otherwise requested by the Division.) One original copy of the completed application (**no faxes or emails**) shall be submitted, only to:

**Colorado Department of Public Health and Environment
Water Quality Control Division
WQCD-Permits-B2
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530**

If you have questions on completing this application, you may contact the Division at cdphe.wqstorm@state.co.us or (303) 692-3517.

B) Who May Apply For and Maintain Permit Coverage

The applicant must be a legal entity that meets the definition of either the owner and/or operator of the industrial activities occurring at the facility, in order for this application to legally cover the activities occurring at the site. The applicant must have day-to-day supervision and control over activities at the facility and implementation of the Stormwater Management Plan (SWMP).

Alternative Permittees: Other agents may also obtain permit coverage if they have clear contractual responsibility and operational control to address the impacts industrial activities may have on stormwater quality (including SWMP implementation). Examples include consultants or property owners acting as facility managers under contract with the owner or operator of the industrial activities, as long as the contractual relationship clearly delegates responsibility for stormwater management. A property owner that is not associated with the actual industrial activities at the site or under contract to adequately perform the stormwater management responsibilities at the site, as discussed above, may not legally maintain permit coverage for industrial activities at their property.

C) Instructions for the Application Form

Item 1 - Applicant Information: Provide the company name, address, phone number, and local contact information for the project. Indicate whether the applicant is the owner or operator of the activities occurring at the facility.

Item 2 - Location of the Facility. Provide the following information:

- **Address and County** – Provide the address of the facility and the county it is located in. If an exact address is not available you may use an approximate address, such as the nearest intersection or boundary streets including directional identifiers (e.g., “S. of Park St. between 5th Ave. and 10th Ave.”, or “W. side of C.R. 21, 3.25 miles N. of Hwy 10”) or other identifying information.
- **Facility Name**
- **Latitude/Longitude** – For the approximate center point of the property, to the nearest 15 seconds. The latitude and longitude must be provided as either degrees, minutes, and seconds, or in decimal degrees with three decimal places. This information may be obtained from a variety of sources, including:
 - EPA maintains a **web-based siting tool** as part of their Toxic Release Inventory program that uses interactive maps and aerial photography to help users get latitude and longitude. The siting tool can be accessed at http://www.epa.gov/tri/report/siting_tool/index.htm
 - U.S. Geological Survey **topographical map**, available at area map stores.
 - Using a **Global Positioning System (GPS) unit** to obtain a direct reading.

Item 3 - SIC Code(s): Provide the Standard Industrial Classification (SIC) Code or codes for the facility. SIC Codes are assigned according to the primary activities performed by a company. They are often assigned for insurance purposes or when a business registers as a corporation. Industries can also determine their SIC Code by checking with their trade association, Chamber of Commerce, legal counsel, or the SIC Manual at your local library, or online at www.osha.gov/pls/imis/sic_manual.html. See Appendix A for a summary of SIC Codes applicable to mining.

Item 4 - Permit Category: In Appendix A, the industries are listed by their SIC Code. (A two digit code, such as 12, means that all industries under that heading, such as 1221, 1249, etc., are covered.) Use this table to determine which of the Division's general permits is appropriate for your facility.

If your facility is not covered by general permit M (Metal Mining), but by one of the other permits, you will need to obtain the appropriate application from the Division. Applications for other permit types are available from the Division's web site at www.cdphe.state.co.us/wq/PermitsUnit.

For mines, the size/status category is necessary in order to determine the fee category for the facility. Inactive mines are mining operations that are not being actively mined. Coal mines, both active and inactive, which are not covered under the Division's general permit for surface coal mining (COG-850000) may use this application to apply for coverage under the Metal Mining general permit.

Item 5 - Receiving Water(s): Identify the receiving water. Receiving waters are any waters of the State of Colorado. This includes all water courses, even if they are usually dry. If stormwater from the facility enters a ditch or storm sewer system, identify that system and indicate the ultimate receiving water for the ditch or storm sewer. **Note:** a stormwater discharge permit does not allow a discharge into a ditch or storm sewer system without the approval of the owner/operator of that system.

Item 6 - Activity Description: Describe the primary type of mining at this facility (e.g., precious metals mine, milling, metal mining services, coal mine, etc.).

Item 7 - Stormwater Management Plan (SWMP) Certification: The certification of completion of a SWMP **must** be signed by the applicant or their authorized agent. For a detailed list of SWMP requirements, see Appendix B of the application. Submittal of the SWMP is not required unless specifically requested by the Division. The plan must be developed and implemented and kept at the facility. The Division reserves the right to request a current copy of the SWMP at any time.

Active and Inactive Mining: Guidance on developing a SWMP is available in Appendix B, and is also online at www.cdphe.state.co.us/wq/PermitsUnit/stormwater/SWMetalGuidance.pdf. If you cannot obtain the guidance from the provided web address, you may contact the Division at 303-692-3517 to obtain a copy (be sure to provide your name, mailing or email address, and the guidance document you need).

For all active and inactive mines, **completion** of a Stormwater Management Plan (SWMP) is required prior to application. Appendix B contains a list of SWMP requirements. (Submittal of the actual plan is not required.) The permit application shall include a signed certification that the SWMP has been completed (Item 7). **Please read and understand the certification statement before signing.** Full implementation of the SWMP is required at the start of facility operations, or when the permit certification becomes effective, whichever is later.

Item 8 - Signature of Applicant: The applicant must be either the owner and/or operator of the industrial activity. Refer to Part B of the instructions, above, for additional information. The application must be signed by the applicant to be considered complete. In all cases, it shall be signed as follows:

- In the case of corporations, by a principal executive officer of at least the level of vice-president or his or her duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge described in the form originates;
- In the case of a partnership, by a general partner;
- In the case of a sole proprietorship, by the proprietor;
- In the case of a municipal, state, or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee, if such employee is responsible for the overall operation of the facility from which the discharge described in the form originates.

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CDPS GENERAL PERMIT

**STORMWATER DISCHARGES ASSOCIATED WITH
METAL MINING OPERATIONS AND MINE-WASTE REMEDIATION**

**AUTHORIZATION TO DISCHARGE UNDER THE
COLORADO DISCHARGE PERMIT SYSTEM**

In compliance with the provisions of the Colorado Water Quality Control Act, (25-8-101 et seq., CRS, 1973 as amended) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq.; the "Act"), this permit authorizes the discharge of stormwater associated with metal mining operations, mine-waste remediation sites, and some coal mines certified under this permit, from those locations specified throughout the State of Colorado to specified waters of the State. Such discharges shall be in accordance with the conditions of this permit.

This permit specifically authorizes the facility listed on page 1 of this permit to discharge stormwater associated with metal mining operations, mine-waste remediation sites, and some coal mines, as of this date, in accordance with the permit requirements and conditions set forth in Parts I and II hereof. All discharges authorized herein shall be consistent with the terms and conditions of this permit.

This permit and the authorization to discharge shall expire at midnight, **September 30, 2011**.

Issued and Signed this 28TH day of **August, 2006**

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Janet S. Kieler
Permits Section Manager
Water Quality Control Division

ISSUED AND SIGNED AUGUST 28, 2006

EFFECTIVE OCTOBER 1, 2006

PART I

A. COVERAGE UNDER THIS PERMIT

1. Authority to Discharge

Under this permit, active and inactive metal mining operations, mine-waste remediation projects at inactive mine sites, and coal mines with process water discharge sources which are authorized under individual CDPS permits, where stormwater has come into contact with any overburden, raw material, intermediate products, byproducts, finished products or waste products located at the mining site, are permitted to discharge stormwater associated with those operations into waters of the state of Colorado. The term mining operation includes active and inactive mining activities.

2. Industries Covered Under this Permit

a. Types of Activities Covered by this Permit:

- 1) This permit authorizes all new and existing discharges composed **entirely** of stormwater associated with active and inactive metal mining operations. (See Rationale, Section III for an explanation of exemptions for uncontaminated stormwater and reclaimed mines.)
- 2) This permit authorizes all new and existing discharges composed **entirely** of stormwater associated with mine-waste remediation projects at the mine-waste site. Separate coverage under this permit is necessary to address stormwater discharges from off-site disposal areas.
- 3) This permit may also authorize existing discharges composed **entirely** of stormwater from any mining operation that is currently covered by an individual CDPS permit for discharge of process water. See Section IV.C of the Rationale for a discussion of stormwater discharges from coal mines with process water discharge sources which are authorized under individual CDPS permits.

b. Definitions

- 1) **Stormwater** is precipitation-induced surface runoff.
- 2) **Mining operations** include facilities classified as Standard Industrial Classification Codes 10 through 14 (metal mining), including active or inactive mining activities. This definition includes operations that have temporarily ceased mining and are in "temporary cessation" status with the Colorado Division of Reclamation, Mining, And Safety, or CDRMS (formerly the Division of Minerals and Geology, or DMG).
- 3) **Active metal mining facility:** a place where work or other activity related to the extraction, removal, or recovery of metal ore is being conducted. Mines that are in temporary cessation are considered active.
- 4) **Inactive metal mining facility:** a site or portion of a site where metal mining and/or milling occurred in the past but is no longer actively occurring.
- 5) **Mine-waste remediation projects:** projects undertaken to reduce or eliminate environmental impacts of mine waste.
- 6) **Mine waste**, for the purposes of this permit, means any mineral material such as overburden, raw materials, intermediate products, byproducts, finished products or waste products, which is or has been disturbed or moved from its naturally occurring location as part of a mineral extraction (mining) activity. Examples of mine waste include: mine tailings, which is ore that has gone through a milling process and then been discarded, and waste rock, which is rock that has been moved from its natural location, but not processed.
- 7) **Best Management Practices (BMPs):** schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment, operating procedures, and practices to control site runoff, spillage or leaks, waste disposal, or drainage from material storage. BMPs include structural and nonstructural controls.

A. COVERAGE UNDER THIS PERMIT (cont.)

- 8) **Operator:** the individual who has day-to-day supervision and control of activities occurring at the mine site.
- 9) **Qualified personnel,** for purposes of site inspections (see Part I.D5) are those who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility, and who can also evaluate the effectiveness of BMPs selected.
- 10) **Remediation,** as used in this permit, means actions taken to reduce or eliminate the overall adverse environmental impact associated with a pollutant source. The term includes actions such as re-routing of surface flows, re-location of a pollutant source, the addition of pollutant neutralizing or immobilizing substances, capping and re-vegetation.
- 11) **Significant Materials** include but are not limited to: raw materials; fuels; materials such as metallic products; hazardous substances designated under section 101(14) of CERCLA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with stormwater discharge.
- 12) **Vegetative Cover:** the aerial projection of all grasses, forbs, mosses (living or dead) onto the ground.

3. Application, Due Dates

- a. **Application Due Dates:** At least **thirty days** prior to the anticipated date of discharge, the owner (or operator when the owner does not operate the facility) of the facility shall submit an application provided by the Division.

The original completed permit application shall be submitted to:

Colorado Department of Public Health and Environment
Water Quality Control Division
WQCD-P-B2
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

- b. **Summary of Application:** The application requires, at a minimum, the following information:

- 1) Name and address of the applicant;
- 2) Site address and location;
- 3) Facility contact person, telephone number, and email address (if available);
- 4) Standard Industrial Classification (SIC) code(s);
- 5) The size of the mining operation in acres;
- 6) Status as active, inactive, or in remediation;
- 7) List of any other environmental permits currently held by the facility;
- 8) Activities which take place at the site;
- 9) Receiving waters; and
- 10) Certification as to the completion of a SWMP.

4. Permit Certification Procedures

If this general permit is appropriate, the Division will issue a certification and the applicant will be authorized to discharge stormwater under this general permit.

- a. **Request for Additional Information:** The Division shall have up to **thirty days** after receipt of the above information to request additional data and/or deny the authorization for any particular discharge. Upon receipt of additional information, the Division shall have an additional **fifteen days** to issue or deny authorization for the particular discharge.
- b. **Automatic Coverage:** If the applicant does not receive a request for additional information or a notification of denial from the Division dated within thirty days of receipt of the application by the Division, authorization to discharge in accordance with the conditions of this permit shall be deemed granted.

A. COVERAGE UNDER THIS PERMIT (cont.)

- c. **Individual Permit Required:** If, after evaluation of the application (or additional information, such as the SWMP), it is found that this general permit is not applicable to the operation, then the application will be processed as one for an individual permit or a more appropriate general permit. The applicant will be notified of the Division's decision to deny certification under this general permit. For an individual permit, additional information may be requested, and 180 days will be required to process the application and issue the permit. Temporary coverage under this general permit may be allowed until the individual permit goes into effect.
- d. **General vs. Individual Permit Coverage:** Any owner or operator authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual CDPS permit. The owner or operator shall submit an individual application, with reasons supporting the request, to the Division at least 180 days prior to any discharge.

5. Individual Permit Criteria

Aside from the operation type, the Division may use other criteria in evaluating whether an individual permit is required instead of this general permit. This information may come from the application, SWMP, or additional information as requested by the Division, and includes, but is not limited to, the following:

- a. the quality of the receiving waters (e.g., the presence of downstream drinking water intakes or a high quality fishery, or for preservation of high quality water);
- b. the type of mining operation, including pollution potential;
- c. the volume and type of materials handled;
- d. the size of the facility;
- e. evidence of noncompliance under a previous permit for the operation;
- f. the use of chemicals within the stormwater system; or
- g. discharges of pollutants of concern to waters for which there is a Total Maximum Daily Load (TMDL) established.

In addition, an individual permit may be required when the Division has shown or has reason to suspect that the stormwater discharge is a significant contributor of pollutants to waters of the State.

6. Permit Expiration Date/Reapplication

Authorization to discharge under this general permit shall expire on September 30, 2011. The Division must evaluate and reissue this general permit once every five years and must recertify the applicant's authority to discharge under the general permit at such time. Any permittee desiring continued authorization under the general permit must reapply by June 30, 2011. The Division will initiate the renewal process; however, it is ultimately the permittee's responsibility to ensure that the renewal is submitted. The Division will determine if the applicant may continue to operate under the terms of the general permit. An individual permit may be required for any facility not reauthorized to discharge under the reissued general permit. For facilities wishing to terminate authorization under the new permit, provisions of Part I.F will be applicable.

B. STORMWATER MANAGEMENT PLAN - ACTIVE MINES

A Stormwater Management Plan (SWMP) shall be developed for the portion of each facility covered by this permit. The SWMP shall include best management practices (BMPs) that are selected, installed, implemented and maintained in accordance with good engineering practices. (The plan need not be completed by a registered engineer.) The plan shall identify potential sources of pollution (including sediment) which may reasonably be expected to affect the quality of stormwater discharges associated with the mining operation. In addition, the plan shall describe and ensure the implementation of BMPs which will be used to reduce the pollutants in stormwater discharges associated with mining activity and to assure compliance with the terms and conditions of this permit.

Permittees must implement the provisions of their SWMP as a condition of this permit. The Division reserves the right to review the plan, and to require additional measures to prevent and control pollution as needed.

Any SWMP prepared before September 30, 2006 that does not meet all of the requirements listed herein (especially those items required for the site map) must be amended to conform with the SWMP requirements in this permit. Such amendments must be completed within 60 days of the certification effective date (which is typically October 1, 2006).

B. STORMWATER MANAGEMENT PLAN - ACTIVE MINES (cont.)

The SWMP for active mines shall include the following items, at a minimum:

1. Description of Mining Activities

The plan shall provide a narrative description of the mining and associated activities taking place at the site which affect or may affect stormwater runoff intended to be covered by this permit. The narrative description shall report the total acreage within the mine site and an estimate of the number of acres of disturbed area. A general description of the location of the mining site relative to major transportation routes and communities shall also be provided.

2. Area Subject to Effluent Limitations Guidelines

Each plan shall describe the portion of the mining site (if any) which contributes runoff to areas subject to effluent limitations guidelines contained in 40 CFR subchapter N.

3. Site Map

Each plan shall provide a site map or maps which indicate at a minimum:

- mining/milling site boundaries and access and haul roads;
- equipment storage, fueling and maintenance areas;
- materials handling areas;
- areas used for storage of overburden, materials, soils or wastes;
- areas used for outdoor manufacturing, heap leach pads, storage or disposal of materials;
- location of mine drainage or any other process water;
- tailings piles/ponds, both new and pre-existing;
- mine drainage or any other process water discharge points;
- existing structural control measures to reduce pollutants in stormwater runoff;
- springs, streams, wetlands and other surface waters; and
- boundary of area that contributes runoff to outfalls that are subject to effluent limitations guidelines.
- all areas of soil disturbance

For those areas outside of the area that contributes runoff to outfalls that are subject to effluent limitations guidelines:

- an estimate of the direction(s) of surface flow;
- stormwater outfalls and an approximate outline of the areas draining to each outfall;
- each existing and new structural control measure to reduce pollutants in stormwater runoff;
- the location of impervious structures (e.g. parking lots, roofs, etc.);
- the locations of all surface water bodies, including dry water courses, located in or next to the facility; and
- the locations of all potential pollutant sources identified under Part I.B.4.b.

4. Stormwater Management Controls

Each mining site certified under by this permit shall develop a description of stormwater quality controls appropriate for that site, and implement such controls. The appropriateness and priorities of controls in the plan shall reflect identified potential sources of pollutants at the mining site. The description of stormwater quality controls shall address the following minimum components, including a schedule for implementing such controls. For newly-certified facilities, if existing controls are inadequate to achieve the general objective of controlling pollutants in stormwater discharges associated with industrial activity, any schedule to implement additional controls to meet this objective shall not exceed 60 days from when the facility begins operations, or from when the general permit certification is issued, whichever is later, unless permission for a later deadline is obtained from the Division. New controls that will replace or modify existing controls that are already adequately addressing a pollutant source are not required to meet this schedule (e.g., replacing a control with a less resource-intensive practice).

- a. **SWMP Administrator** - The SWMP shall identify a specific individual or individuals within the mining organization who is responsible for developing the SWMP and assisting the mine operator in its implementation, maintenance, and revision. The activities and responsibilities of the administrator shall address all aspects of the facility's SWMP.

B. STORMWATER MANAGEMENT PLAN - ACTIVE MINES (cont.)

- b. **Identification of Potential Pollutant Sources and Best Management Practices** - The SWMP shall identify potential sources of pollutants at the site, and assess the potential of these sources to contribute pollutants to stormwater discharges associated with mining activities. The SWMP must also describe appropriate Best Management Practices (BMPs) to reduce the potential of these sources to contribute pollutants to stormwater discharges. At a minimum, each of the following shall be evaluated for the reasonable potential for contributing pollutants to runoff:

- loading and unloading operations;
- outdoor storage of chemicals or equipment;
- outdoor milling or processing activities;
- crushing facilities or significant dust and particulate generating activities;
- on-site waste disposal practices;
- stockpiles of overburden, raw material, intermediate products, byproducts, finished products or waste products; and
- disturbed areas.

Factors to consider include the toxicity of the material; quantity of chemicals used; amount of material processed; the likelihood of contact with stormwater; and history of significant drainage, leaks or spills of toxic or hazardous pollutants.

The description of the BMPs shall include:

- 1) **Stormwater diversion:** Describe how and where stormwater will be diverted away from material handling and storage areas to prevent stormwater contamination.
- 2) **Materials handling and spill prevention:** For materials that could impact stormwater runoff, all existing and planned BMPs that prevent the contamination of stormwater runoff at the site shall be included and described.
- 3) **Sediment and erosion prevention:** Describe practices that will be used to reduce erosion and prevent sediment delivery to State waters. These could include structural (such as silt fences, sediment ponds, drop structures, check dams) and non-structural (such as mulching and revegetation) methods.
- 4) **Other pollution prevention measures:** The plan shall identify any other structural and non-structural measures for stormwater quality control on-site.

In each case where stormwater pollution potential exists, appropriate preventive measures must be identified and implemented.

- c. **Preventive Maintenance** - A preventive maintenance program is required, and shall involve inspection and maintenance of stormwater management devices (maintenance of dikes separating mine drainage from stormwater, cleaning oil/water separators and catch basins, etc.) as well as inspecting and testing of equipment and systems to prevent conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters. These periodic inspections are different from the comprehensive site evaluation (see Part I.D.5), although the former may be incorporated into the latter. Equipment, area, or other inspections are typically visual and are normally conducted on a regular basis (e.g., daily inspections of loading areas).
- d. **Good Housekeeping** - The SWMP shall identify good housekeeping procedures that will be followed by the mining operation. Good housekeeping requires the maintenance of a clean, orderly facility. This part of the SWMP shall address cleaning and maintenance schedules, trash collection and disposal practices, grounds maintenance, etc.
- e. **Spill Prevention and Response Procedures** - Areas where potential spills can occur, and their accompanying drainage points, shall be identified clearly in the SWMP. Where appropriate, specifying material handling procedures and storage requirements in the plan shall be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean-up shall be available to personnel.
- f. **Employee Education** - The SWMP shall describe employee education programs to inform personnel at all levels of responsibility (who are involved in mining activities that may impact stormwater runoff) of the components and goals of the SWMP. Education shall address topics such as spill response, good housekeeping and material management practices. The SWMP shall identify periodic dates for such instruction. Contractor or temporary personnel shall be informed of mine operations and control features in order to prevent stormwater pollution from occurring.

B. STORMWATER MANAGEMENT PLAN - ACTIVE MINES (cont.)

- g. **Identification of Discharges other than Stormwater** - The stormwater conveyance system on the site shall be evaluated for the presence of discharges other than stormwater. The SWMP shall include a description of the results of any evaluation for the presence of discharges other than stormwater, the method used, the date of any evaluations and the on-site drainage points that were directly observed during the evaluation.

A number of discharges other than stormwater may not require a CDPS Wastewater Discharge permit and are considered Allowable Non-stormwater Discharges. These are listed at Part I.D.3, below. Any of these discharges that exist at the site must be identified in the SWMP.

5. Comprehensive Inspection

The SWMP shall identify qualified personnel that shall inspect designated equipment and mine areas at appropriate intervals specified in the plan, at least twice a year (in the spring and fall). The operator shall keep a record of such inspections. This record shall be made available to the Division upon request and shall be summarized in the Annual Report (see Part I.E.1.a of the permit).

6. Consistency with Other Plans

SWMPs may reflect requirements for Spill Prevention Control and Countermeasure (SPCC) plans under section 311 of the CWA, or Best Management Practices (BMPs) Programs otherwise required by a CDPS permit, and may incorporate any part of such plans into the SWMP by reference. The SWMP may rely upon information developed for other similar pollution control programs, including the Mined Land Reclamation Plan. Appropriate portions of these other plans may be incorporated in the SWMP by reference, as long as a **complete** SWMP can be reproduced and submitted to the requesting agency within the time frame specified in the request. Those portions of the referenced documents must be included in the submittal. The SWMP must also be readily available to an on-site inspector.

C. STORMWATER MANAGEMENT PLAN - INACTIVE MINES

A Stormwater Management Plan (SWMP) shall be developed for each inactive mine covered by this permit. The SWMP shall include best management practices (BMPs) that are selected, installed, implemented and maintained in accordance with good engineering practices. (The plan need not be completed by a registered engineer.) The plan shall identify potential sources of pollution (including sediment) which may reasonably be expected to affect the quality of stormwater discharges associated with the inactive mining operation. In addition, the plan shall describe and ensure the implementation of BMPs which will be used to reduce the pollutants in stormwater discharges associated with the inactive mining operation and to assure compliance with the terms and conditions of this permit.

Inactive mining operations must implement the provisions of their SWMP as a condition of this permit. The Division reserves the right to review the plan, and to require additional measures to prevent and control pollution as needed.

Any SWMP prepared before September 30, 2006 that does not meet all of the requirements listed herein (especially those items required for the site map) must be amended to conform with the SWMP requirements in this permit. Such amendments must be completed within 60 days of the certification effective date (which is typically October 1, 2006).

The SWMP shall include the following items, at a minimum:

1. Description of Mining Activities

The plan shall provide a narrative description of the mining and associated activities that took place at the site which affect or may affect stormwater runoff intended to be covered by this permit. The narrative description shall report the approximate dates of operation, the total acreage within the mine site and an estimate of the number of acres of disturbed area. A general description of the location of the mining site relative to major transportation routes and communities shall also be provided.

C. STORMWATER MANAGEMENT PLAN - INACTIVE MINES (cont.)

2. Site Map

Each plan shall provide a generalized site map or maps which indicate any of the following which may be applicable:

- mining/milling site boundaries and access and haul roads;
- equipment storage, fueling and maintenance areas;
- materials handling areas;
- areas used for storage of overburden, materials, soils, tailings or wastes;
- areas used for outdoor manufacturing, heap leach pads, storage or disposal of materials;
- location of mine drainage or any other process water;
- tailings piles and ponds;
- an estimate of the direction(s) of surface flow;
- stormwater outfalls and an approximate outline of the areas draining to each outfall;
- existing structural control measures to reduce pollutants in stormwater runoff;
- springs, streams, wetlands and other surface waters; and
- all areas of soil disturbance.

3. Stormwater Management Controls - Identification of Sources and Best Management Practices

Each mining site certified under by this permit shall develop a description of stormwater quality controls appropriate for that site, and implement such controls. The appropriateness and priorities of controls in the plan shall reflect identified potential sources of pollutants at the mining site. The description of stormwater quality controls shall address the following minimum components, including a schedule for implementing such controls. For newly-certified facilities, if existing controls are inadequate to achieve the general objective of controlling pollutants in stormwater discharges associated with industrial activity, any schedule to implement additional controls to meet this objective shall not exceed 60 days from when the facility begins operations, or from when the general permit certification is issued, whichever is later, unless permission for a later deadline is obtained from the Division. New controls that will replace or modify existing controls that are already adequately addressing a pollutant source are not required to meet this schedule (e.g., replacing a control with a less resource-intensive practice).

- a. **SWMP Administrator** - The SWMP shall identify a specific individual or individuals within the mining organization who is responsible for developing the SWMP and assisting the mine operator in its implementation, maintenance, and revision. The activities and responsibilities of the administrator shall address all aspects of the facility's SWMP.
- b. **Identification of Potential Pollutant Sources and Best Management Practices** - The SWMP shall identify potential sources of pollutants at the site, and assess the potential of these sources to contribute pollutants to stormwater discharges associated with mining activities. The SWMP must also describe appropriate Best Management Practices (BMPs) to reduce the potential of these sources to contribute pollutants to stormwater discharges.

At a minimum, each of the following shall be evaluated for the reasonable potential for contributing pollutants to runoff:

- outdoor storage of chemicals or equipment;
- on-site waste disposal practices;
- overburden, raw material, intermediate products, byproducts, finished products or waste products; and
- disturbed areas

Factors to consider include the toxicity of the material; quantity of chemicals used; the likelihood of contact with stormwater; and history of significant drainage, leaks or spills of toxic or hazardous pollutants.

The description of the BMPs shall include:

- 1) **Stormwater Diversion**: Describe how and where stormwater will be diverted away from potential pollutant sources to prevent stormwater contamination.
- 2) **Sediment and Erosion Prevention**: Describe practices that will be used to reduce erosion and prevent sediment delivery to State waters. These could include structural (such as silt fences, sediment ponds, drop structures, check dams) and non-structural (such as mulching and revegetation) methods.

C. **STORMWATER MANAGEMENT PLAN - INACTIVE MINES (cont.)**

- 3) **Other pollution prevention measures:** The plan shall identify any other structural and non-structural measures for stormwater quality control on-site.

In each case where stormwater pollution potential exists, appropriate preventive measures must be identified and implemented.

Inactive mining sites that have non-mining activity occurring (such as remediation) must also evaluate the other potential sources listed in Part I.B.4.b, and must include in their SWMP the items listed in Parts I.B.4.c, d, e, f and g, as applicable.

4. **Comprehensive Inspection**

The SWMP shall identify qualified personnel that shall inspect designated equipment and mine areas at appropriate intervals specified in the plan, at least annually. Where annual inspections are impracticable, certification is required once every three years by a Registered Professional Engineer that the site is in compliance with the SWMP. The operator shall keep a record of such inspections. This record shall be made available to the Division upon request and shall be summarized in the Compliance Report (see Part I.E.1.b of the permit).

5. **Additional SWMP Items for Sites Seeking Mine Remediation/Permit Termination**

Additional requirements apply in the event that the permittee wishes to remediate the inactive mine site and terminate permit coverage. If the site is already covered by this permit, the permittee shall notify the Division as to the change in status. Notification shall be prior to the implementation of the remediation work, if possible. The SWMP must be amended to include the following items, prior to implementation of the remediation work, if possible:

- a. **Documentation of Permission:** The plan shall include documentation of permission from the land owner, if the remediation work is undertaken by someone other than the land owner.
- b. **Photographs:** The plan shall include photographs documenting the condition of the inactive mine site before any remedial action has occurred. For recently active mines, photographs of the active mining phase may be substituted.
- c. **Description of Remedial Action:** The plan shall describe the remedial action that will take place to minimize or eliminate the water quality impacts from the mine waste. The description shall include:
 - Remediation Goal Statement;
 - the characteristics of the mineralogical content of the mine waste, and estimated volume of the waste;
 - description of any materials that will be mixed into the mine waste on site; and
 - estimated surface area of the final site, and estimated angle of side slopes.
- d. **Description of BMPs during Remediation Activities:** The plan shall describe the BMPs that will be implemented to reduce the potential of remediation activities to contribute pollutants to stormwater discharges. Activities that shall be addressed include, at a minimum, vehicle maintenance, earth moving, revegetation, material storage and spill prevention.
- e. **Procedures for Disposal of Water Stored Within Mine Waste:** The permittee must describe how any water stored within the mine waste will be collected and/or routed to any storage or treatment facilities. No discharge of this water shall be made to waters of the state, unless separate CDPS permit coverage is obtained.
- f. **Description of Permanent BMPs, Final Site Stabilization, and Ultimate Land Use:** The plan shall include a description of the specific permanent measures that will be installed or used at the mine waste site. The description shall include any of the following if appropriate: specifications for capping or isolation of the mine waste, method and type of revegetation, and other permanent BMPs. The plan shall also include a description of the ultimate land use after remediation is complete.

C. STORMWATER MANAGEMENT PLAN - INACTIVE MINES (cont.)

6. Consistency with Other Plans

SWMPs may reflect requirements for Spill Prevention Control and Countermeasure (SPCC) plans under section 311 of the CWA, or Best Management Practices (BMPs) Programs otherwise required by a CDPS permit, and may incorporate any part of such plans into the SWMP by reference. The SWMP may reflect information contained in approved plans submitted for other similar pollution control programs, including the Voluntary Clean Up Program, (Voluntary Cleanup and Redevelopment Act, CRS 25-16-303) as long as they contain the elements described above. These plans must have been approved by the implementing agency prior to application for the stormwater permit. Appropriate portions of these other plans may be incorporated in the SWMP by reference, as long as a **complete** SWMP can be reproduced and submitted to the requesting agency within the time frame specified in the request. Those portions of the referenced documents **must** be included in the submittal. The SWMP must also be readily available to an on-site inspector.

D. BASIC TERMS AND CONDITIONS – ALL FACILITIES

1. General Limitations

The following limitations shall apply to all discharges authorized by this permit:

- a. Stormwater discharges from mining operations or mine-waste remediation projects shall not cause or threaten to cause pollution, contamination or degradation of State waters.
- b. Bulk storage structures for petroleum products and any other chemicals shall have secondary containment or equivalent adequate protection so as to contain all spills and prevent any spilled material from entering State waters.
- c. No chemicals are to be added to the discharge unless permission for the use of a specific chemical is granted by the Division. In granting the use of such chemicals, special conditions and monitoring may be addressed by separate letter.
- d. All dischargers must comply with the lawful requirements of counties, drainage districts and other state or local agencies regarding any discharges of stormwater to storm drain systems or other water courses under their jurisdiction.

2. SWMP Requirements

The following conditions must be met to achieve compliance with this permit:

- a. **SWMP Preparation and Implementation:** The SWMP shall be prepared prior to applying for coverage under the general permit, and certification of completion submitted with the application. **The SWMP shall be implemented when the facility begins operation, or when the general permit certification is issued, whichever is later, and updated as appropriate (see paragraph c., below).**
- b. **SWMP Retention:** For **active** mining operations, the plan shall be retained on site. For **inactive** mining operations, the plan shall be retained by the permittee.
- c. **SWMP Review/Changes:**
 - 1) **Division Review:** The Division reserves the right to request and review the plans, and to require additional measures to prevent and control pollution, as needed. Upon review of the SWMP, the Division may notify the permittee at any time that the plan does not meet one or more of the minimum requirements of this permit. After such notification, the permittee shall make changes to the plan and shall submit to the Division an update to the plan including the requested changes. Unless otherwise provided by the Division, the permittee shall have 30 days after such notification to both make the necessary changes to the plan and to implement them.

If the Division determines that the permittee's discharges may cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard, the Division may require the permittee, within a specified time period, to develop and implement a supplemental BMP action plan describing SWMP modifications to adequately address the identified water quality concerns.

D. BASIC TERMS AND CONDITIONS -- ALL FACILITIES (cont.)

- 2) **Permittee Review/Change:** The permittee shall amend the plan whenever there is a change in design, construction, operation, or maintenance which has a significant effect on the potential for the discharge of pollutants to the waters of the State, or if the SWMP proves to be ineffective in achieving the general objectives of controlling pollutants in stormwater discharges associated with mining activity. If existing BMPs need to be modified or if additional BMPs are necessary, the plan changes and implementation must be completed before the next anticipated storm, or not more than **60 days** after the change in design, construction, operation, or maintenance, or; the SWMP has been determined to be ineffective, unless this time frame is extended by the Division. Amendments to the plan shall be summarized in the Annual or Compliance Report. The Division reserves the right to require additional measures to prevent and control pollution, as needed.

3. Prohibition of Non-stormwater Discharges

- a. Except as provided in paragraph b, below, **all discharges authorized by this permit shall be composed entirely of stormwater.** Discharges of water other than stormwater must be addressed in a separate CDPS permit issued for that discharge.
- b. Discharges from the following sources that are combined with stormwater discharges associated with mining activity may be authorized by this permit, provided that the non-stormwater component of the discharge is identified in the SWMP (see Part I.B.4.g of the permit): fire fighting activities, uncontaminated compressor condensate, irrigation drainage, lawn watering, air conditioner condensate, uncontaminated seeps and springs, and foundation or footing drains where flows are not contaminated.

4. Releases in Excess of Reportable Quantities

This permit does not relieve the permittee of the reporting requirements of 40 CFR 110, 40 CFR 117 or 40 CFR 302. Any discharge of hazardous material must be handled in accordance with the Division's Notification Requirements (see Part II.A.3 of the permit).

5. Facility Inspections

- a. **Active Mining Operations.** In addition to the inspections necessary to comply with the preventive maintenance program requirements in Part I.B.4.c, qualified personnel identified by the permittee shall make a thorough inspection of their stormwater management system, at least twice per year (in the spring and fall). Where semi-annual site inspections are shown in the plan to be impracticable because an employee is not stationed at or does not routinely visit the site, inspections as required in this part shall be conducted at appropriate intervals specified in the plan, but never less than once in two years. These inspections must be documented and summarized in the Annual Report (see Part I.E.1 of the permit).
- b. **Inactive Mining Operations.** Qualified personnel identified by the permittee shall make a thorough inspection of their stormwater management system, at least once per year. Where annual inspections are shown in the plan to be impracticable, because an employee is not stationed at or does not routinely visit the site, an inspection is required at least once every three years by a Registered Professional Engineer. The inspector must certify that the site is in compliance with the plan. If the site is not in compliance with the plan, it must be brought into compliance, reinspected, and plan compliance then certified by the inspector. These inspections must be documented and summarized in the Compliance Report (see Part I.E.1 of the permit).
- c. **Remediation Operations.** Qualified personnel identified by the permittee shall make a thorough inspection of their stormwater management system, at least once per year (in the field season). Where annual site inspections are shown in the plan to be impracticable, because an employee is not stationed at or does not routinely visit the site, inspections as required in this part shall be conducted at appropriate intervals specified in the plan, but never less than once in two years. These inspections must be documented and summarized in the Annual Report (see Part I.E.1 of the permit).

D. BASIC TERMS AND CONDITIONS -- ALL FACILITIES (cont.)

d. Inspection Requirements - ALL Operations. The inspections as required above must include the following:

- 1) Disturbed areas, areas used for material storage or handling that are exposed to precipitation, and other potential sources of pollution identified in the SWMP in accordance with Part I.B.4.b or Part I.C.3.b shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures and other structural pollution prevention measures identified in the SWMP shall be observed to ensure that they are operating correctly.
- 2) Any repairs or maintenance needs identified by the inspection shall be completed immediately. Based on the results of the inspection, if revisions to the description of the potential pollutant sources and the pollution prevention and control measures identified in the SWMP are needed, the plan shall be revised as appropriate as soon as practicable after such inspection. Revised control measures shall be implemented in a timely manner, but in no case more than 90 calendar days after the inspection, unless otherwise provided by the Division, and in compliance with the requirements of Part I.D.2.c.2.
- 3) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, significant observations relating to the implementation of the SWMP, and actions taken in accordance with paragraph (b), above, shall be made and retained for at least three years after the date of the inspection. Significant observations include such things as the locations of discharges of pollutants from the site; locations of previously unidentified sources of pollutants; locations of BMPs needing maintenance or repair; locations of failed BMPs that need replacement; and locations where additional BMPs are needed. The report must also document any incidents of noncompliance observed. This record shall be made available to the Division upon request and summarized in the Annual or Compliance Report.

6. Monitoring

Sampling and testing of stormwater for specific parameters is not required on a routine basis under this permit. The Division reserves the right to require sampling and testing, on a case-by-case basis, in the event that there is reason to suspect that compliance with the SWMP is a problem, or to measure the effectiveness of the BMPs in removing pollutants from the discharge.

7. SWMP Availability

Upon request, the permittee shall submit a copy of the SWMP to the Division, the Colorado Division of Reclamation, Mining, And Safety, or CDRMS (formerly the Division of Minerals and Geology, or DMG) and/or EPA, and any local agency approving sediment and erosion plans or stormwater management plans, within the time frames specified in the request. If the SWMP is required to be submitted to any of these entities, it must include a signed certification in accordance with Part I.E.5 of the permit, certifying that the SWMP is complete and meets all permit requirements.

All SWMPs required under this permit are considered reports that shall be available to the public under Section 308(b) of the CWA. The owner or operator of a facility with stormwater discharges covered by this permit shall make plans available to members of the public upon request. However, the permittee may claim any portion of a SWMP as confidential in accordance with 40 CFR part 2.

8. Total Maximum Daily Load (TMDL)

If a TMDL has been approved for any waterbody into which the permittee discharges, and it has been determined that the types of discharges covered under this permit are or have the potential to be identified as a significant source of the pollutant in question, the permittee will be notified by the Division. The permittee will be required to do the following:

- a. Under the permittee's SWMP, implement specific management practices based on requirements of the TMDL, and evaluate whether the requirements are being met through implementation of existing stormwater BMPs or if additional BMPs are necessary. Document the calculations or other evidence that show that the requirements, including any specific pollutant wasteload allocations (WLAs), are expected to be met; and

D. BASIC TERMS AND CONDITIONS – ALL FACILITIES (cont.)

- b. If the evaluation shows that additional or modified BMPs are necessary, describe the type and schedule for the BMP additions/revisions. A description of the SWMP changes shall be included with the next Annual or Compliance Report, or if requested by the Division, whichever is sooner.

Discharge monitoring may also be required. The permittee may maintain coverage under the general permit provided they comply with the applicable requirements outlined above. The Division reserves the right to require individual or alternate general permit coverage.

E. REPORTING REQUIREMENTS

1. Reporting

- a. **Annual Report for Active Mining Operations.** The permittee will be required to submit an Annual Report, covering January 1 through December 31 of each year, on their compliance with the SWMP. The Annual Report will contain, at a minimum:

- 1) Name of permittee, address, phone number, and permit certification number.
- 2) A report on the facility's overall compliance with the SWMP.
- 3) A summary of each comprehensive stormwater facility inspection made, including date, findings, and action taken. If the inspection frequency that is less than twice per year, in accordance with the allowable reduced inspection frequencies in Part I.D.5.a of this permit, the Annual Report must indicate the reason.
- 4) Results and interpretation of any stormwater monitoring performed.
- 5) Certification language and signature by the permittee. (See Part I.E.5 of the permit.)

The Annual Report will be due to the Division on or before **February 15** of the following year. The exact due date for the permittee's first Annual Report will be listed in their permit certification. The Division reserves the right to require additional information in the report, on a case-by-case basis, as needed.

- b. **Compliance Report for Inactive Mining Operations:** The permittee will be required to submit a report on the compliance with the SWMP. The report shall contain, at a minimum:

- 1) Name of permittee, address, phone number, and permit certification number.
- 2) A report on the facility's overall compliance with the SWMP.
- 3) A summary of the annual inspection reports, including date, findings, and action taken, or the triennial certification by a Professional Engineer (based on one or more inspections) that the facility is in compliance with the permit. If the inspection frequency that is less than once per year, in accordance with the allowable reduced inspection frequencies in Part I.D.5.b of this permit, the Annual Report must indicate the reason.
- 4) Certification language and signature by the permittee. (See Part I.E.5 of the permit.)

The report will be due to the Division on or before **February 15, 2011** and cover the period of time between the coverage by this version of the general permit and December 31, 2010. The Division reserves the right to require additional information in the report, and more frequent reports, on a case-by-case basis, as needed.

- c. **Annual Report for Remediation Operations:** The permittee will be required to submit an Annual Report, covering January 1 through December 31 of each year, on the overall compliance with the SWMP. The Annual Report shall contain, at a minimum:

- 1) Name of permittee, address, phone number, and permit certification number.
- 2) A report on the facility's overall compliance with the SWMP, including a progress report on all remediation activities.
- 3) A summary of each comprehensive stormwater facility inspection made, including date, findings, and action taken. If the inspection frequency that is less than once per year, in accordance with the allowable reduced inspection frequencies in Part I.D.5.c of this permit, the Annual Report must indicate the reason.
- 4) Results and interpretation of any stormwater monitoring performed.
- 5) Certification language and signature by the permittee. (See Part I.E.5 of the permit.)

E. REPORTING REQUIREMENTS (cont.)

The Annual Report will be due to the Division on or before **February 15** of the following year. The exact due date for the permittee's first Annual Report will be listed in their permit certification. The Division reserves the right to require additional information in the report, and more frequent reports, on a case-by-case basis, as needed.

- d. **Reporting Address:** A signed copy of the above report forms(s) shall be submitted to the following address:

Colorado Department of Public Health & Environment
Water Quality Control Division
WQCD-P-B2
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

2. Monitoring

Sampling and testing of stormwater for specific parameters is not required on a routine basis under this permit. The Division reserves the right to require sampling and testing, on a case-by-case basis, in the event that there is reason to suspect that compliance with the SWMP is a problem, or to measure the effectiveness of the BMPs in removing pollutants in the effluent.

If monitoring is required, the following definitions apply:

- a. The **thirty (30) day average** shall be determined by the arithmetic mean of all samples collected during a thirty (30) consecutive-day period.
- b. A **grab sample**, for monitoring requirements, is a single "dip and take" sample.

3. Reporting of Data

Reporting of any monitoring data gathered in compliance with Part I.D.6 or I.D.8 shall be on an annual basis, unless otherwise specified by the Division.

Monitoring results shall be summarized for each year (January 1-December 31) and reported on Division-approved discharge monitoring report forms and submitted to the Division with the Annual Report due **February 15** of each year at the address above.

4. Reporting to Municipality

Any permitted facility discharging to a municipal storm sewer shall provide the municipality with a copy of the permit application, and/or Annual Reports, upon request. A copy of the SWMP shall also be provided to the municipality upon request.

5. Signatory Requirements

- a. All reports and applications submitted to the Division and/or EPA shall be signed and certified for accuracy by the permittee in accordance with the following criteria:
 - 1) In the case of corporations, by a principal executive officer of at least the level of vice-president or his or her duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge described in the form originates;
 - 2) In the case of a partnership, by a general partner;
 - 3) In the case of a sole proprietorship, by the proprietor;
 - 4) In the case of a municipal, state, or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee, if such employee is responsible for the overall operation of the facility from which the discharge described in the permit originates.

E. REPORTING REQUIREMENTS (cont.)

- b. **Changes to authorization.** If an authorization under paragraph a. of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph a. of this section must be submitted to the Division, prior to or together with any reports, information, or applications to be signed by an authorized representative.

- c. **Certification.** Any person signing a document under paragraph a. of this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

6. Record-keeping and Internal Reporting Procedures

The permittee shall retain a copy of the SWMP required by this permit for the duration of this permit.

Incidents such as spills or other discharges, along with other information describing the quality and quantity of stormwater discharges, shall be included in the records. Inspections and maintenance activities shall be documented and recorded. (This does not relieve the permittee of the responsibility of reporting spills as required under section 25-8-601(2) of the Colorado Water Quality Control Act.) The permittee shall retain such records for a minimum of three (3) years from the date generated. All reports required by the permit and/or the Division, and any relevant correspondence, shall be retained for a minimum of five (5) years from the date generated.

F. TERMINATION OF PERMIT COVERAGE

1. Termination Criteria

- a. **Reclamation Permit Release:** When a site has been reclaimed in accordance with the Colorado Division of Reclamation, Mining, And Safety, or CDRMS (formerly the Division of Minerals and Geology, or DMG) requirements and the site has been released from State reclamation requirements, the permittee may request stormwater permit termination.
- b. **Termination in the absence of CDRMS Permit:** For facilities without CDRMS permits, permittees wishing to terminate stormwater permit coverage through mine waste remediation must amend their SWMP to include the items listed in Part I.C.5, above, prior to implementation of the remediation work. In addition, permittees seeking coverage under the Voluntary Cleanup Act must notify the Division of their intent 30 days before any remediation activities commence. The notification must include certification language and signature by the permittee. (See Part I.E.5 of the permit.)

Certification under this permit may be terminated once raw materials, intermediate products, byproducts, finished products and waste products (including acid generating material exposed by the mining activity) have been permanently removed or isolated and the site has been stabilized (with little evidence of soil erosion or other runoff problem) and revegetated. The following criteria must be met for the entire mine site, including any on-site disposal areas:

- 1) all raw materials, intermediate products, byproducts, finished products and waste products (including acid generating material exposed by the mining activity) have been removed or permanently isolated from stormwater; and
- 2) all soil disturbing activities at the site have been completed; and
- 3) vegetation has been established with an average cover or density, over the previously disturbed area, of a minimum of 40 percent vegetative cover over the area, or 70 percent of the vegetative cover of a similar undisturbed site, whichever is higher (vegetative cover or density determinations need not be determined scientifically by extensive measurement and statistical analyses; simple representative transects are adequate.); or equivalent permanent physical erosion reduction methods have been employed.

F. TERMINATION OF PERMIT COVERAGE (cont.)

The Division may, after consultation with the permittee and upon good cause being shown, revise the vegetative cover requirements on a case-by-case basis.

2. Request for Termination

When a site has been reclaimed in accordance with the CDRMS requirements and the site has been released from State reclamation requirements, or the above Termination Criteria have been met, the permittee may request certification termination. The Division will consider termination of permit coverage when:

- a. the permittee has submitted a completed Inactivation Form as provided by the Division which summarizes the work accomplished;
- b. In the case of mine waste remediation projects, the permittee has submitted photographic documentation of the post remediation conditions at the mine site;
- c. All stormwater discharges to state waters associated with mining activities have ceased and the permittee has demonstrated to the Division the termination criteria have been met or the CDRMS performance bond has been released;
- d. The Division finds that the permittee has shown reasonable grounds consistent with the Federal and State statutes and regulations for such termination; and
- e. Fee requirements of Section 61.15 of State Discharge Permit System Regulations have been met.

Continued coverage may be required after reclamation or remediation has been completed if the Division has shown or has reason to suspect that the stormwater discharges may contribute to a violation of a water quality standard.

PART II

A. MANAGEMENT REQUIREMENTS

1. Change in Discharge

The permittee shall inform the Division (Permits Section) in writing of any intent to construct, install, or alter any process, facility, or activity that is likely to result in a new or altered discharge that is not composed entirely of stormwater and/or allowable non-stormwater discharges identified in Part I.D.3.b. Division notification is also required if the permittee significantly changes the industrial activities at the site such that the industrial activities are no longer consistent with the activity description and/or SIC Code(s) originally identified in the permit application. The permittee shall furnish the Division such plans and specifications which the Division deems reasonably necessary to evaluate the effect on the discharge and receiving stream. If applicable, this notification may be accomplished through submittal of an application for a CDPS process water permit authorizing the discharge. The SWMP shall be updated and implemented prior to the changes. Also see Part I.D.2.c.2).

Any discharge to the waters of the State from a point source other than specifically authorized by this permit or a different CDPS permit is prohibited.

2. Special Notifications - Definitions

- a. **Spill:** An unintentional release of solid or liquid material which may cause pollution of state waters.
- b. **Upset:** An exceptional incident in which there is unintentional and temporary noncompliance with permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

A. MANAGEMENT REQUIREMENTS (cont.)

3. Noncompliance Notification

- a. If, for any reason, the permittee does not comply with or will be unable to comply with any discharge limitations, standards or permit requirements specified in this permit, except as addressed in sub-paragraph c. of this section, the permittee shall, at a minimum, provide the Water Quality Control Division and EPA with the following information:
 - 1) A description of the discharge and cause of noncompliance;
 - 2) The period of noncompliance, including exact dates and times and/or the anticipated time when the discharge will return to compliance; and
 - 3) Steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.
- b. The permittee shall report the following instances of noncompliance orally within twenty-four (24) hours from the time the permittee becomes aware of the noncompliance, and shall mail to the Division a written report within five (5) days after becoming aware of the noncompliance (unless otherwise specified by the Division):
 - 1) Any instance of noncompliance which may endanger health or the environment;
 - 2) Any spill or discharge of oil or other substance which may cause pollution of the waters of the state;
 - 3) Any discharge of stormwater which may cause an exceedance of a water quality standard.
- c. The permittee shall report all other instances of non-compliance to the Division in the following Annual or Compliance Report. The reports shall contain the information listed in sub-paragraph a. of this section.

4. Submission of Incorrect or Incomplete Information

Where the permittee failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or report to the Division, or relevant new information becomes available, the permittee shall promptly submit the relevant application information which was not submitted or any additional information needed to correct any erroneous information previously submitted.

5. Bypass

The bypass of treatment facilities is generally prohibited.

6. Upsets

a. Effect of an Upset

An upset constitutes an affirmative defense to an action brought for noncompliance with permit limitations and requirements if the requirements of paragraph b. of this section are met. (No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.)

b. Conditions Necessary for a Demonstration of Upset

A permittee who wishes to establish the affirmative defense of upset shall demonstrate through properly signed contemporaneous operating logs, or other relevant evidence that:

- 1) An upset occurred and that the permittee can identify the specific cause(s) of the upset;
- 2) The permitted facility was at the time being properly operated;

A. MANAGEMENT REQUIREMENTS (cont.)

- 3) The permittee submitted notice of the upset as required in Part II.A.3. of this permit (24-hour notice); and
- 4) The permittee complied with any remedial measures required under Section 122.7(d) of the federal regulations.

c. Burden of Proof

In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

7. Removed Substances

Solids, sludges, or other pollutants removed in the course of treatment or control of discharges shall be properly disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the State.

8. Minimization of Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to waters of the State resulting from noncompliance with any terms and conditions specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

9. Reduction, Loss, or Failure of Stormwater Controls

The permittee has the duty to halt or reduce any activity if necessary to maintain compliance with the permit requirements. Upon reduction, loss, or failure of the stormwater control, the permittee shall, to the extent necessary to maintain compliance with its permit, control production, or remove all pollutant sources from exposure to stormwater, or both until the stormwater controls are restored or an alternative method of treatment/control is provided.

It shall not be a defense for a permittee in an enforcement action that it would be necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

10. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

B. RESPONSIBILITIES

1. Inspections and Right to Entry

The permittee shall allow the Director of the State Water Quality Control Division, the EPA Regional Administrator, and/or their authorized representative(s), upon the presentation of credentials:

- a. To enter upon the permittee's premises where a regulated facility or activity is located or in which any records are required to be kept under the terms and conditions of this permit;
- b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit and to inspect any monitoring equipment or monitoring method required in the permit; and
- c. To enter upon the permittee's premises to investigate, within reason, any actual, suspected, or potential source of water pollution, or any violation of the Colorado Water Quality Control Act. The investigation may include, but is not limited to, the following: sampling of any discharge and/or process waters, the taking of photographs, interviewing permittee staff on alleged violations and other matters related to the permit, and access to any and all facilities or areas within the permittee's premises that may have any effect on the discharge, permit, or any alleged violation.

B. RESPONSIBILITIES (cont.)

2. Duty to Provide Information

The permittee shall furnish to the Division, within the time frame specified by the Division, any information which the Division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating coverage under this permit, or to determine compliance with this permit. The permittee shall also furnish to the Division, upon request, copies of records required to be kept by this permit.

3. Transfer of Ownership or Control

Certification under this permit may be transferred to a new permittee if:

- a. The current permittee notifies the Division in writing 30 days in advance of the proposed transfer date; and
- b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage and liability between them; and
- c. The current permittee has met all fee requirements of the State Discharge Permit System Regulations, Section 61.15.

4. Modification, Suspension, or Revocation of Permit By Division

All permit modification, termination or revocation and reissuance actions shall be subject to the requirements of the State Discharge Permit System Regulations, Sections 61.5(2), 61.5(3), 61.7 and 61.15, 5 C.C.R. 1002-61, except for minor modifications.

- a. This permit, and/or certification under this permit, may be modified, suspended, or revoked in whole or in part during its term for reasons determined by the Division including, but not limited to, the following:
 - 1) Violation of any terms or conditions of the permit;
 - 2) Obtaining a permit by misrepresentation or failing to disclose any fact which is material to the granting or denial of a permit or to the establishment of terms or conditions of the permit;
 - 3) Materially false or inaccurate statements or information in the application for the permit;
 - 4) Promulgation of toxic effluent standards or prohibitions (including any schedule of compliance specified in such effluent standard or prohibition) which are established under Section 307 of the Clean Water Act, where such a toxic pollutant is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit.
- b. This permit, and/or certification under this permit, may be modified in whole or in part due to a change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge, such as:
 - 1) Promulgation of Water Quality Standards applicable to waters affected by the permitted discharge; or
 - 2) Effluent limitations or other requirements applicable pursuant to the State Act or federal requirements; or
 - 3) Control regulations promulgated; or
 - 4) Data submitted pursuant to Part I.E or other available information indicates a potential for violation of adopted Water Quality Standards or stream classifications.

B. RESPONSIBILITIES (cont.)

- c. This permit, or certification under this permit, may be modified in whole or in part to include new effluent limitations and other appropriate permit conditions where information submitted pursuant to Part I indicates that such effluent limitations and permit conditions are necessary to ensure compliance with applicable water quality standards and protection of classified uses.

5. Permit Violations

Failure to comply with any terms and/or conditions of this permit shall be a violation of this permit. Dischargers of stormwater associated with industrial activity, as defined in the EPA Stormwater Regulation (40 CFR 122.26(b)(14), which do not obtain coverage under this or other Colorado general permits, or under an individual CDPS permit regulating industrial stormwater, will be in violation of the federal Clean Water Act and the Colorado Water Quality Control Act, 25-8-101. Failure to comply with CDPS permit requirements will also constitute a violation. Civil penalties for such violations may be up to \$10,000 per day, and criminal pollution of state waters is punishable by fines of up to \$25,000 per day.

6. Legal Responsibilities

The issuance of this permit does not convey any property or water rights in either real or personal property, or stream flows, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under Section 311 (Oil and Hazardous Substance Liability) of the Clean Water Act.

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority granted by Section 510 of the Clean Water Act.

7. Severability

The provisions of this permit are severable. If any provisions of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances and the application of the remainder of this permit shall not be affected.

8. Renewal Application

If the permittee desires to continue to discharge, a permit renewal application shall be submitted at least ninety (90) days before this permit expires. If the permittee anticipates that there will be no discharge after the expiration date of this permit, the Division should be promptly notified so that it can terminate the permit in accordance with Part I.F.

9. Confidentiality

Except for data determined to be confidential under Section 308 of the Federal Clean Water Act and Regulations for the State Discharge Permit System 61.5(4), all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Division. The permittee must state what is confidential at the time of submittal.

Any information relating to any secret process, method of manufacture or production, or sales or marketing data which has been declared confidential by the permittee, and which may be acquired, ascertained, or discovered, whether in any sampling investigation, emergency investigation, or otherwise, shall not be publicly disclosed by any member, officer, or employee of the Commission or the Division, but shall be kept confidential. Any person seeking to invoke the protection of this section shall bear the burden of proving its applicability. This section shall never be interpreted as preventing full disclosure of effluent data.

B. RESPONSIBILITIES (cont.)

10. Fees

The permittee is required to submit payment of an annual fee as set forth in the Water Quality Control Act. Failure to submit the required fee when due and payable is a violation of the permit and will result in enforcement action pursuant to Section 25-8-601 et seq., C.R.S. 1973 as amended.

11. Requiring an Individual CDPS Permit

The Director may require any owner or operator covered under this permit to apply for and obtain an individual or alternate general CDPS permit if:

- a. The discharger is not in compliance with the conditions of this general permit;
- b. Conditions or standards have changed so that the discharge no longer qualifies for a general permit; or
- c. Data/information become available which indicate water quality standards may be violated.

The owner or operator must be notified in writing that an application for an individual or alternate general CDPS permit is required. When an individual or alternate general CDPS permit is issued to an owner or operator otherwise covered under this General Permit, the applicability of this general permit to that owner or operator is automatically terminated upon the effective date of the individual or alternate general CDPS permit.